

THE AMERICAN PSYCHOLOGIST

VOLUME 15



NUMBER 4

April 1960

Published Monthly by

THE AMERICAN PSYCHOLOGICAL ASSOCIATION, INC.

IMPORTANT NEW MCGRAW-HILL BOOKS

THE NEUROPSYCHOLOGY OF LASHLEY

By FRANK A. BEACH, *University of California, Berkeley*; DONALD O. HEBB, *McGill University*; CLIFFORD T. MORGAN, *University of Wisconsin*; and HENRY NISSEN, 564 pages, \$9.50.

This volume, compiled by four of Lashley's former students, does honor to the memory of Karl S. Lashley—"the man who, as much as anyone, determined the shape of modern psychology." This is a compilation of Lashley's original papers, reflecting the range of his interest and achievements.

CONFLICT, AROUSAL, AND CURIOSITY

By D. E. BERLYNE. *McGraw-Hill Series in Psychology*. Ready in July.

An advanced, graduate-level book intended as a contribution to behavior theory. The author reviews such facts as are available relevant to attention and exploratory behavior; presents a tentative theory to integrate these facts and guide future research; and shows the connections between exploratory behavior and such areas as motivation and learning, thinking, aesthetics, and humor. Further, he points out interrelationships between various lines of theory and research in the field.

BARGAINING AND GROUP DECISION MAKING

By SIDNEY SIEGEL and LAWRENCE E. FOURAKER, *both of Pennsylvania State University*. 132 pages, \$4.90.

This work was the recipient of the Monograph Prize of the American Academy of Arts and Sciences for the year 1959 in the field of the social sciences. The book is the result of highly original work by a psychologist and an economist into the processes of decision making and choice, including investigation of psychological factors in economic decision. It reports a series of controlled experimental studies on the decisions individuals make when bargaining.

CRIME, JUSTICE, AND CORRECTION

By PAUL W. TAPPAN, *New York University*. *McGraw-Hill Series in Sociology*. Ready in May.

A long-awaited criminology text by the author of JUVENILE DELINQUENCY and CONTEMPORARY CORRECTION. The book covers three major areas: (1) The Nature and Causes of Crime, (2) The Administration of Justice, and (3) Corrections. Designed for undergraduate and graduate students in criminology and penology courses.

Send for Copies on Approval

McGRAW-HILL BOOK COMPANY, INC.

330 West 42nd Street

New York 36, New York

THE AMERICAN PSYCHOLOGIST

Journal of the American Psychological Association, Inc.

Volume 15

April 1960

Number 4

In this Issue

Some Problems of Defining Ethical Behavior. WAYNE H. HOLTZMAN	247
The History of Psychology: A Neglected Area. ROBERT I. WATSON	251
The Problem of Measurement in the Psychology of the Eighteenth Century. KONSTANTIN RAMUL	256
Applicants for Fellow Status	266
Comment	268
Psychology in Action	271
Psychology in the News	274
Psychology in the States	276
Notes and News	279
Convention Calendar	283
General Arrangements: Sixty-Eighth Annual Convention of the APA. GEORGE S. SPEER and PHILIP ASH	284

JOHN G. DARLEY, Editor

ARTHUR C. HOFFMAN, Managing Editor

HELEN ORR, Promotion Manager

THE AMERICAN PSYCHOLOGIST is published monthly at Prince and Lemon Streets, Lancaster, Pennsylvania. Subscription: \$8.00, single copy: \$1.00. Communications on editorial and business matters and advertising should be addressed to the American Psychological Association, Inc., 1333 Sixteenth Street N.W., Washington 6, D. C. Address changes must reach the Subscription Office by the 10th of the month to take effect the following month. Undelivered copies resulting from address changes will not be replaced; subscribers should notify the post office that they will guarantee second-class forwarding postage. Other claims for undelivered copies must be made within four months of publication.

Second-class postage paid at Lancaster, Pa.

Copyright © 1960 by the American Psychological Association, Inc.

Officers of the American Psychological Association

President

DONALD O. HEBB
McGill University
Montreal, Canada

President-elect

NEAL E. MILLER
Yale University
New Haven, Connecticut

Past President

WOLFGANG KÖHLER
Dartmouth College
Hanover, New Hampshire

Recording Secretary

LAUNOR F. CARTER
System Development Corporation
Santa Monica, California

Treasurer

MEREDITH P. CRAWFORD
Human Resources Research Office
Washington 6, D. C.

Executive Secretary

JOHN G. DARLEY
1333 Sixteenth Street N.W.
Washington 6, D. C.

Board of Directors

The President, the President-elect, the Past President, the Recording Secretary, the Treasurer, the Executive Secretary, and QUINN McNEMAR, GARDNER MURPHY, EDWIN B. NEWMAN, VICTOR C. RAIMY, NEVITT SANFORD, and ROBERT L. THORNDIKE.

The American Psychological Association, founded in 1892 and incorporated in 1925, is the major psychological organization in the United States. The purpose of the APA is to advance psychology as a science, as a profession, and as a means of promoting human welfare. It attempts to further these objectives by holding annual meetings, publishing psychological journals, and working toward improved standards for psychological training and service.

In addition to journals, the APA publishes a monthly *Employment Bulletin* and an annual biographical *Directory*.

All general communications; inquiries concerning membership; letters concerning dues, subscriptions, and changes of address should be directed to:

American Psychological Association, Inc.
1333 Sixteenth Street, N.W.
Washington 6, D. C.

Publications of the American Psychological Association

American Psychologist. Editor: JOHN G. DARLEY, American Psychological Association. Official papers of the association and articles on psychology. Monthly. Subscription: \$8.00 (Foreign \$8.50). Single copies, \$1.00.

Contemporary Psychology. Editor: EDWIN G. BORING, Harvard University. Critical reviews of books, films, and other material in the field of psychology. Monthly. Subscription: \$8.00 (Foreign \$8.00). Single copies, \$1.00.

Journal of Abnormal and Social Psychology. Editor: M. BREWSTER SMITH, University of California, Berkeley. Original contributions in the field of abnormal and social psychology, and case reports. Bimonthly, two volumes per year. Subscription: \$16.00 for 2 vols. (Foreign \$16.50). Single copies, \$3.00.

Journal of Applied Psychology. Editor: JOHN G. DARLEY, American Psychological Association. Applications of psychology to business and industry. Bimonthly. Subscription: \$8.00 (Foreign \$8.50). Single copies, \$1.50.

Journal of Comparative and Physiological Psychology. Editor: HARRY F. HARLOW, University of Wisconsin. Original contributions in the field of comparative and physiological psychology. Bimonthly. Subscription: \$8.00 (Foreign \$8.50). Single copies, \$1.50.

Journal of Consulting Psychology. Editor: EDWARD S. BORDIN, University of Michigan. Research in clinical psychology: psychological diagnosis, psychotherapy, personality, and psychopathology. Bimonthly. Subscription: \$8.00 (Foreign \$8.50). Single copies, \$1.50.

Journal of Educational Psychology. Editor: RAYMOND G. KUHLLEN, Syracuse University. Studies of learning and teaching. Bimonthly. Subscription: \$8.00 (Foreign \$8.50). Single copies, \$1.50.

Journal of Experimental Psychology. Editor: ARTHUR W. MELTON, University of Michigan. Original contributions of an experimental character. Monthly, two volumes per year. Subscription: \$16.00 for 2 vols. (Foreign \$16.50). Single copies, \$1.50.

Psychological Abstracts. Editor: HORACE B. ENGLISH, Ohio State University. Noncritical abstracts of the world's literature in psychology and related subjects. Bimonthly. Subscription: \$16.00 (Foreign \$16.50). Single copies, \$3.00.

Psychological Bulletin. Editor: HARRY HELSON, University of Texas. Evaluative reviews of research literature, and articles on research methodology in psychology. Bimonthly. Subscription: \$8.00 (Foreign \$8.50). Single copies, \$1.50.

Psychological Monographs: General and Applied. Editor: NORMAN L. MUNN, Bowdoin College. Longer researches and laboratory studies which appear as units. Published at irregular intervals. Subscription: \$8.00 per volume (Foreign \$8.50). Single copies, price varies according to size.

Psychological Review. Editor: RICHARD L. SOLOMON, Harvard University. Original contributions of a theoretical nature. Bimonthly. Subscription: \$8.00 (Foreign \$8.50). Single copies, \$1.50.

SOME PROBLEMS OF DEFINING ETHICAL BEHAVIOR¹

WAYNE H. HOLTZMAN

Hogg Foundation for Mental Health, University of Texas

WHEN asked if I would participate in a symposium dealing with ethical issues in business and industrial psychology, I welcomed the opportunity to share with members of APA some of the difficult problems encountered by the Committee on Ethical Standards in its recent attempt to formulate a streamlined version of our code of ethics. Many of you will recall the years of work that went into the original version of the code published in 1952. Under the skillful leadership of Nicholas Hobbs, this first committee constructed a code of ethics on an empirical basis, a huge task involving thousands of contributed statements and hundreds of individuals. Without the extensive effort that went into the *Ethical Standards of Psychologists*, the present committee would have faced an impossible task. As it was, the current committee labored through nine revisions over a period of three years before the latest version was published (APA, 1959) and adopted for use by APA on a trial basis. Containing only 18 major principles, the current code retains the essence of the original but in a form more conducive to close scrutiny and wide distribution.

The Committee on Ethical Standards hopes that these major principles stated in general form will weather considerable growth of psychology without drastic alteration. Unlike the general principles, the explanatory paragraphs which accompany them are quite specific and, therefore, subject to change or extension as the need arises. They may serve their purpose fairly well for the present, but it would be a sad mistake indeed to assume that there is little left to say about the ethical behavior of psychologists!

Time after time, our committee was forced to leave a controversial issue in general terms rather than spelling out in great detail a prescription for professional behavior. In most cases these are un-

resolved issues that require a great deal of discussion and additional critical incidents of controversial behavior before they can be resolved satisfactorily. In the last analysis, some of these issues involve a deep conflict of values for which there is no foreseeable solution. While the decisions rendered in specific cases by our counterpart, the Committee on Scientific and Professional Ethics and Conduct, will do much to clarify some of these issues during the next several years, we must take the initiative by seizing every opportunity to air these matters and to search for general consensus of professional opinion. I hope that further discussion can deal specifically with these issues, some of which I shall touch upon briefly.

If I were asked to name the most important of the principles in our code of ethics, I would settle for three principles which form the cornerstones of nearly all the rest:

Principle 2, dealing with the maintenance of high standards of professional competence, the limitations of techniques, and the boundaries of competence; Principle 4, concerning misrepresentation; and Principle 7, dealing with client welfare. But even these statements, as lofty and universally accepted as they are in general form, fall seriously short of defining what is or is not ethical behavior in many specific situations. How does one define competence? What constitutes misrepresentation of one's professional qualifications, affiliations, and purposes? Who is the client when one speaks of client welfare? Is it the industrial corporation which employs the services of the psychologist? Or is it the individual employee who may be evaluated or may receive counseling by the psychologist in the course of serving the corporation?

Closely related to the fundamental principle that the psychologist avoids misrepresentation of his own professional qualifications, affiliations, and purposes is Principle 10 dealing with advertising. This principle states that

A psychologist who advertises or makes public announcement of his services, describes them with accuracy and

¹ A paper prepared for the Division 14 Symposium on Advertising and Promotional Practices for Business and Industrial Psychologists held at the Annual Meeting of the American Psychological Association, Cincinnati, Ohio, September 7, 1959.

dignity, adhering to professional rather than to commercial standards.

Immediately, this principle raises the issue of professional versus commercial standards and how to define the two points of view. Fortunately, some of the older professions such as medicine and law have grappled with this same issue for many years, making it easier for psychologists to cope with the problem. The form to be used for announcement of individual consulting practice is fairly well prescribed in the first two paragraphs under Principle 10. Agency announcements and the use of brochures for announcing nonclinical services still remain a serious problem. Frequently, the consulting psychologist must compete with other personnel consultants many of whom adhere more closely to commercial standards of promoting and advertising their services. In a competitive struggle for a place in the sun, it is very tempting to rationalize many practices that would be seriously challenged by others who have no personal stake in the outcome. The more ambiguous the announced rules of the game in a code of ethics, the more latitude for such individual rationalization to justify certain promotional practices. Here is one place where nothing further can be done until some consensus is reached among the members of Division 14 concerning acceptable practices in business and industry.

A second issue of some concern to many psychologists is illustrated by Principle 9 which states that

Psychological services for the purpose of individual diagnosis, treatment, or advice are provided only in the context of a professional relationship, and are not given by means of public lectures or demonstrations, newspapers or magazine articles, radio or television programs, mail, or similar media.

In most instances when an offer to give such psychological service smacks of a mail-order catalog, we would all agree that the practice is unethical and should be stopped. But suppose that someone comes along with a new technique having demonstrated validity for certain limited types of individual assessment even when offered impersonally by mail. While I would be one of the first to proclaim loudly that no such technique now exists, I would be reluctant to dismiss completely the possibility of such a service at some time in the future. One of the problems with Principle 9, of course, is the failure to define precisely what is a

professional relationship, except by exclusion of completely impersonal services.

A third problem that may confront psychologists more and more as the general public becomes aware of the nature of psychological techniques is the issue of test security as outlined in Principle 13. Psychologists have generally subscribed to the principle that access to tests and similar assessment devices should be limited to persons with professional interests who will safeguard their use. While this principle is well justified from the psychologists's point of view, it is much harder to defend it before the general public, especially when such tests are employed for selection and evaluation. The man in the street may wonder whether the psychologist is trying to put something over on him by his secret, disguised techniques, straining public relations of the psychologist unless he is able to communicate effectively why such test security is necessary and, even more important, for what purposes such tests will be used.

A fourth issue of concern to psychologists in business and industry is the question of test interpretation. Who shall be given the results of tests or other individual assessment data, and in what form shall they be released? Principle 14 tells us that

Test scores, like test materials, are released only to persons who are qualified to interpret and use them properly.

Is the personnel executive qualified? The office supervisor? The company president? A later paragraph under Principle 14 states only very generally how assessment data should be communicated to employers, relatives, or other appropriate persons. In the last analysis, practice must be determined by the good judgment of an experienced psychologist who follows closely the spirit of this principle by minimizing the amount of jargon and technical information that is communicated to the layman, and by keeping constantly in mind the cardinal principle of client welfare.

A fifth issue that bothers many psychologists and bears directly upon certain promotional practices in industry is the matter of test publication and advertisement. Principle 15 was one of two principles that caused considerable trouble for the committee which revised the code of ethics. What constitutes adequate standardization and validation for a test to be employed in practical situations?

To what extent should the author of the test bare his soul in confessing all the shortcomings as well as strengths of his test? Paragraph b under Principle 15 is particularly important in this regard:

The populations for which the test has been developed and the purposes for which it is recommended are stated in the manual. Limitations upon the test's dependability, and aspects of its validity on which research is lacking or incomplete, are clearly stated. In particular, the manual draws attention to interpretations likely to be made which have not yet been substantiated by research.

When taken very seriously, I dare say that this principle is violated more flagrantly than any other in our code of ethics. The enthusiastic author and obliging publisher cannot resist the temptation to sell the test as the latest word, the answer to every eager personnel executive's problems. In glancing casually through some of the test blurbs currently in circulation, I have been greatly disturbed by the rather cavalier treatment of this fundamental issue by some publishers and their authors. And yet, no one seems to be doing much about it, probably because in most cases there is not much that can be done. Such promotional activities rarely seem outrageous enough to goad someone into pressing charges of unethical conduct.

I have saved for last a set of issues presented by Principle 7, the cardinal principle dealing with client welfare, because I firmly believe that the future acceptance or rejection of applied psychology by the public will depend largely upon how well the psychologist can resolve certain conflicts of interest in favor of the long-range welfare of the person or group with whom he works.

Foremost among these issues is the need for a better definition of who is the client. There is no difficulty when a psychologist is sought out for individual diagnosis or counseling. The client is obviously the person seeking help with his problem. But when a psychologist views a corporation or organization as his client, following in the footsteps of other management consultants, serious conflicts may arise. Can one really serve the needs of management in developing a more effective company while also doing what is always best from the point of view of the man down the line who may be adversely affected by the outcome? Perhaps, but it is certainly not easy!

Related to the question of who is the client of the industrial consulting psychologist is the issue of invasion of personal privacy to obtain individual

assessment data. To be sure, an employee is never forced to take a test or submit himself to an interview. But if he should balk at the idea, it is difficult to convince his boss that he has nothing to hide of relevance to his work competence. Admittedly, in most cases there is no other way in which to obtain the evaluative information so essential in most personnel studies. Granting that such personal information must be gathered for certain purposes, the critical point is the degree to which the psychologist reveals to the individual the purpose of the evaluation at the time the information is collected. In his Presidential Address to the Division of Consulting Psychology two years ago, Jay Otis coined a phrase, "psychological espionage," which gets at the root of the matter. While he sees no way to avoid completely the ethical issue in question, at least he makes a plea for psychological espionage that is helpful to the individual concerned rather than detrimental to his best interests.

With the increasing application of psychology to all aspects of human relations, a deep fear has arisen in some individuals of the power presumably invested in the psychologist who obtains personal information by unusual means and has the capability of manipulating people. The current rage of popular books and articles ranging from Vance Packard's *Hidden Persuaders* to Martin Gross' vicious attack on the "brain pickers" testifies to the pervasiveness and often irrational character of this fear. We have not heard the last of such critical attacks upon the psychologist in business and industry. Unless we clean house by a tough minded tightening of standards and a more effective campaign against questionable practices engaged in by a few psychologists, all psychologists will suffer by implication in the eyes of the general public.

Paragraph 7d was specifically added to the code for this purpose and reads as follows:

The psychologist who asks that an individual reveal personal information in the course of interviewing, testing, or evaluation, or who allows such information to be divulged to him, does so only after making certain that the person is aware of the purpose of the interview, testing, or evaluation and of ways in which the information may be used.

How well this principle will serve its purpose, remains to be seen.

You may well ask what all of this has to do with ethical problems in the advertising and promotion

of psychological services for business and industry. Several of the ethical issues I have discussed are indeed only indirectly related to the main topic of this symposium—at least at first glance. Nevertheless, all of them are fundamental to the practice of psychology in a business or industrial setting. Upon close examination these principles and the ethical issues involved appear to be more interwoven than their titles would suggest. In the last analysis, what is, or is not, ethical behavior remains a question of contrasting values. Quite wisely, the Hobbs committee began with an empirical approach to the codifying of behavior. A code of ethics must be close enough to the con-

temporary scene to win the genuine acceptance of the majority who are most directly affected by its principles. At the same time, the heart of the code must be based upon a lasting idealism that can serve as a model worthy of all psychologists for generations to come. Given the three cornerstones of high standards of personal competence, painstaking avoidance of misrepresentations, and primary concern for the integrity and welfare of the persons with whom the psychologist works, the rest is up to you.

REFERENCE

- AMERICAN PSYCHOLOGICAL ASSOCIATION. Ethical standards of psychologists. *Amer. Psychologist*, 1959, 14, 279-282.

THE HISTORY OF PSYCHOLOGY:

A NEGLECTED AREA

ROBERT I. WATSON

Northwestern University

IN the United States psychology is provincial, both geographically and temporally. While almost any European psychologist whom we meet surprises us by his knowledge of our work, we fall far short of equivalent familiarity with psychological activities in his country. Our relative ignorance of current psychological activities outside the United States is so well known and seemingly so complacently accepted as hardly to need exposition. It is not my intent to discuss our geographical provincialism except to point out that it seems to be similar to our historical provincialism, suggesting the possibility of common causal factors. Instead, I propose to document the extent of the current neglect of the history of our field, to suggest some of the factors which help to bring about this neglect, to answer certain possible criticisms of devoting one's time to advancing knowledge of our history, and to try to show some positive values to be found by research in our history. I shall close with a few comments about the preparation for work in the history of psychology.

A variety of sources of evidence shows our neglect of the history of psychology. Some evidence may be found by examining the number of historical articles in our journals, by establishing the extent of expressions of interest in history by APA members, and by finding the number of psychologists who are members of the leading history of science society in the United States.

Three journals publish most of the historically oriented publication of psychologists in the United States: the *American Journal of Psychology*, the *Journal of General Psychology*, and the *Psychological Bulletin*. The contents of each of these journals for the last 20 years (1938-1957) were examined. Articles, excluding program descriptions, accounts of meetings, and obituaries, were classified as historical or nonhistorical. To be classified as historical the major theme of the article had to be placed in an historical perspective. Reviews, for example, which acknowledged they cov-

ered the work of 10, or 20, or some identified number of years, were not considered historical if they treated the research they discussed as more or less equally contemporaneous. In the *American Journal of Psychology* 12 out of 1,207 articles were historical in nature in this 20-year period. In the *Journal of General Psychology* only 13 historical articles appeared from a total of 937 articles. In the *Psychological Bulletin* 682 articles were published during this period of which 13 were historical in nature. It seems evident that psychologists publish only a handful of historical articles: 38 were primarily historical out of more than 2,800 articles over a 20-year period in the three journals examined.

An obvious source for the expression of interests by psychologists is the statement of their interests given by APA members in the *Directory*. Every tenth page of the 1958 *Directory* was searched for mention of interest in the history of psychology. In this way the stated interests of 1,638 psychologists were examined. Those mentioning an interest in history numbered 6. Extrapolating from the sample to the total membership of 16,644 gives only about 60 psychologists who consider the history of psychology among their interests, irrespective of whether or not they publish.

The History of Science Society is probably the leading organization in its field in the United States. We have some information about its membership. Using the 1951 APA *Directory* as the source, Daniel and Louttit (1953) listed the professional organizations to which a 12% sample of APA members belonged. They stopped listing by name of organization when they reached societies with five or less APA members. The History of Science Society was not listed. Moreover, not a single psychologist was found by a name-by-name check of about 5% of the organization's membership list.

On the basis of number of publications, expressed interest in the field, and membership in a speciality society, it seems appropriate to conclude that the history of psychology receives relatively little at-

tention from psychologists in the United States at the present time.

Neglect of our history is an indication of a value judgment on the part of psychologists. Almost all psychologists simply have not been interested in it enough to be curious about it, let alone to work and to publish in this area. Probably there is a general distaste for historical matters among scientists in the United States, including psychologists. If this be true, psychologists as social beings share in a characteristic aberration of our times: a relative lack of curiosity about our past. Moreover, we have reached an age of specialization in psychology. The age of encyclopedists, if it ever existed, is certainly past. We must reconcile ourselves to limitation within our field. In short, we are specialists, not generalists.

It is one of the dubious fruits of specialization that one makes a sharp distinction between the historical development of his subject and the additive process by which he, himself, is developing it. The contemporary general lack of interest concerning the past and the age of specialism is shared by psychologists with other scientists. It is my impression that this neglect is even greater in psychology than in neighboring fields such as biology, medicine, and sociology. In these fields even a cursory acquaintance shows signs of considerably greater historical activity.

Specific to psychology, two related factors may accentuate our temporal provincialism, both stemming from psychology's relatively recent emergence as a science in its own right. First, we may be a bit ashamed of our past. The *nouveau riche* does not search his family tree. Second, self-conscious, as we are, of our recent hard-won victory of full-fledged scientific status, we may regard our heritage, as well as much European psychology, as somehow not quite respectable fields of interest simply because they smack of the unscientific. Interest in history is, save the mark, even scholarly!

In a somewhat more encouraging vein, still another reason for our relatively greater neglect of history is our sheer exuberance and what we have before us in the way of what appear to be limitless opportunities for research and service. Making history, we do not study what others have done in the past. There can be little question that our advances apparently are rapid, our expansion in numbers amazing.

The tremendous advances in scientific knowledge in our own and other fields lead to a feeling of exhilaration and satisfaction that should not be denied. The last 50 years has perhaps seen more scientific industry directed toward psychological problems than has all time before it. In the perspective of the future this optimistic judgment concerning the present half century may be shared by our successors, despite the doubt derived from the curious similarity of this remark to that made by many, many others concerning their own particular age. Be that as it may, I suspect many psychologists are influenced by some such unspoken opinion to the detriment of interest in the history of their field.

These speculations about the neglect of the history of psychology just presented may or may not be correct. Whatever their objective status as truth, they do not deal with the crucial question. One may still ask: "Assuming what you have said is correct, of what contemporary interest is the psychology of the past?" To put it baldly, why should serious attention and respect be given the history of psychology? It is necessary to inquire whether or not this lack of attention is precisely what the history of our field deserves. The question may be made more specific by asking whether this lack of attention to history does or does not reflect lack of significant material or lack of relevance of the material even if available.

It might be argued that the neglect of history that has been demonstrated is simply a reflection of the lack of significant material. Within the compass of this paper illustrations from only one temporal period may be given. The most unlikely period of all—the Middle Ages—is chosen for this purpose. Serious attention to the medieval period in our history has not been given since Brett published his *History of Psychology* nearly 50 years ago. In the meanwhile, as I propose to demonstrate, new sources have become available, and the number of workers in the general field of the history of science, who incidentally have touched upon matters of psychological interest, has increased considerably.

The basic source of my illustrations is to be found in the monumental *Introduction to the History of Science* by George Sarton. In connection with the medieval period he prepared a synopsis of about 2,000 pages in length. In these pages he

made reference to what I consider to be psychological work on the part of 49 men. These references were to work either said to be psychological by Sarton or to psychological topics such as sensation and oneirology. For records of their accomplishments to appear in this survey of Sarton, they must have been preserved through the centuries of the medieval period and the 500 years since. One would expect that in view of this form of eminence the odds would be in favor that they should be known at least vaguely to psychologists. Selecting every fifth name from the list of 49 gives the following: Ibn Sirin, Al-Mas-Udi, Ibn Hibat Allah, Ibn Al-Jausi, Bahya Ben Joseph, Ibn Sabin, Peter of Spain, Thomas of York, and Witelo. I rather suspect that very, very few would be known to most psychologists.

It is relevant to compare the list of names of men found by reading Sarton to have worked in areas of psychology during the 900 years of the medieval period with those considered in Brett's history 50 years ago. Only 15 of the 49 are considered by Brett. A great majority of the Muslims and Jews found in Sarton were not mentioned at all by him. It would be a mistake to infer that Brett considered the workers he did not discuss as irrelevant because of lack of contact with Western intellectual development. Scholars in the Muslim world, including the Jewish workers among them, are acknowledged to be the intellectual leaders of the later centuries of the medieval period. Most of their works were translated into Latin in their own time or in the centuries that followed. Western commentaries on these works also appeared. Only at the end of the medieval period did their influence wane. It is quite plausible to believe that they were neglected by Brett because knowledge about them was either relatively inaccessible or even unknown at the time he was working.

It is difficult to classify medieval scholars into the neat categories demarcating the fields of knowledge of today. In any age the greater the man the more apt he is to range beyond the boundaries of one particular field. Yet it is possible by study of their contributions to classify them roughly into one or another field of knowledge. Sarton's description of the activities of these 49 medieval scholars was used as the basis of classification.

Contrary to expectation, less than one-half (21) were primarily philosophers and/or theologians. Nearly one-third (14) were physicians. The rest

were scattered in a variety of other fields, none including more than two representatives. These fields were that of the chronologist, philologist, oneirologist, folklorist, traveler, physicist, astronomer, mathematician, historian, jurist, and oculist. Only one man, Isaac of Stella, was identified by Sarton as primarily a psychologist. In a broader sense he was a philosopher and was so classified by me. It will be remembered that 15 of these 49 workers were utilized by Brett in his history. Over half (8) of those to whom Brett referred were theologians and philosophers; while of those remaining, 6 were physicians and physicists. It is evident that only one of the 14 representatives of the other more peripheral fields, identified in Sarton, was utilized by him. Moreover, 10 philosophers and 10 physicians were found in Sarton that were not touched upon by Brett at all.

Two of the medieval psychologists are chosen for slightly more detailed exposition. One has been already mentioned—Peter of Spain, later John XXI. He had been trained as a physician (and in the classification was so placed) and had wide medical, zoological, logical, philosophical, and psychological interests. In psychology he wrote a volume on psychology, *De Anima*, which included an account of the historical development of psychological ideas found in Greek and Muslim works covering a *thousand years* of the history of psychology. Lest this work be dismissed as "mere" philosophy, it should be added that, according to Sarton, it stresses physiological and medical aspects! Elevated to the pontificate in 1276, he died in an accident eight months later. That there was a psychologist pope is probably not even known among most Catholic psychologists.

One of the greatest minds of the Middle Ages will serve as the second illustration—Moses Maimonides. He is best known for his *Guide for the Perplexed*, a monument of Jewish theology. Other than one relatively obscure reference, it never has been called to the attention of psychologists that this work contains material of psychological significance. For example, memory is discussed in Chapters 33–36 of Part I, and mind in Chapters 31–32 of Part I and Chapter 37 of Part II. Maimonides also wrote on medical matters, including descriptions of prophetic visions as psychological experiences; on the rules of psychotherapy; and various other psychological-medical matters. There is a strong probability that careful study of his

works would reveal a theory of personality of some significance for us today.

These two men—Peter of Spain and Moses Maimonides—should have a special appeal to psychologists whose background of Catholic or Jewish scholarship makes them especially well prepared to evaluate their significance.

In general, there appears to be evidence that the 900 years from the sixth to the fifteenth centuries were not without their share of psychological speculation and observation. Scholars have examined this material in a philosophical perspective, but there has been an almost complete neglect of the psychological aspects.

It was following the medieval period that the revival of learning at the beginning of the modern period took place. This was the rebirth of Greek, particularly Aristotelian, ways of thinking in the twelfth and the thirteenth centuries, which gave us the origin of the empirical, especially experimental, ways of approaching nature. Out of the work of Renaissance man comes what we know about the origins of our present knowledge.

That greatest of modern historians of science, George Sarton, has shown that the "Dark Ages" transmitted the science of the Greek and the Hellenistic worlds. Transmission is, in itself, just as important as discovery and is sufficient reason to study the Middle Ages. But even more important, as Sarton puts it, medieval progress occurred not because of, but in spite of, its presumed crowning achievement of scholastic philosophy. Medievalists, he claimed, have stressed the scholastic aspects to the detriment of the real scientific advance especially in the Muslim world. In spite of scholastic and obscurantist tendencies which repel the modern mind, examination of the contributions of these men of the Middle Ages to psychology as psychology, separated from philosophical and theological preoccupation, would seem to be a worthwhile venture.

For the Middle Ages, and presumably even more cogently for other ages, we do not lack new material, and there would appear to be at least some contemporary relevance for its study. A more general statement of the values of historical study in psychology seems indicated.

It would be a serious mistake to consider the history of psychology to be limited to a mere chronology of events or biographical chitchat. It is a study of long-time cultural trends over time.

Psychological contributions are embedded in the social context from which they emerge. Psychology has always responded in part to its social environment, but it also has been guided by an internal logic of its own. We cannot emphasize one of these trends at the expense of the other. Psychology neither reflects culture with passive compliance nor does it exist in a social vacuum. External and internal circumstances are present, and there is a constant interplay between them.

It is a truism of one approach to history that each generation rewrites the history in terms of its own values and attitudes. As yet, we have not looked back on the past from the perspective of today finding values for the present from the past. Old material is still to be seen in a new perspective. In the past writing of our history, material either ignored as irrelevant or simply not known at that time now can be utilized. The material from the Middle Ages commented upon earlier would illustrate the new material available. The presence of newly relevant material needs further comment. The field of psychology has expanded enormously in recent years. That it has re-extended beyond the limits of experimental psychology is a statement of fact on which there can be no disagreement. Consider the influence of the rapidly burgeoning fields of application, such as clinical psychology, and remember that the moment we expend our present concerns in psychology to that extent we have broadened and changed our past. The moment we embrace, even in the smallest degree, the traditions of others as, for example, we have done for some aspects of medicine, we have embraced some aspects of their past as well. Consider the importance in psychology today of personality theories and other influences of quasi- or nonexperimental nature. The history of experimental psychology is the solid core of our history, presumably less changed in this re-examination; but other aspects of its history do exist. In recent years no one has examined all major aspects of our history in the light of these changes.

An even more serious consequence of the neglect of history needs comment. To modify somewhat a statement from Croce via Beard: when we ignore history in the sense of the grand tradition of that field, narrowness and class, provincial and regional prejudices come in their stead to dominate or distort one's views without any necessary awareness of their influence. If psychologists are determined

to remain ignorant of our history, are we not, at best, determined to have some of our labors take the form of discoveries which are truisms found independently and, at worst, to repeat the errors of the past? To embody a past of which they are ignorant is, at best, to be subject passively to it, at worst, to be distorted by a false conception of it. Ignorance does not necessarily mean lack of influence upon human conduct, including the human conduct of psychologists. Ignoring the study of the history of one's field through formal sources and published accounts does not result in lack of opinions about the past. Like the traditional man in the street who, too, refuses to read history, such psychologists inevitably have a picture of the past, by and large one which deprecates its importance. This inevitably influences their views just as does any other aspect of the "unverbalized." However little their ahistorical view of the past may correspond to reality, it still helps to determine their views of the present. To neglect history does not mean to escape its influence.

This has been a plea for greater attention on the part of psychologists to their history. With assumption of some knowledge and experience in contemporary psychology, the first stage of development of attention to history would be an interest in it and a conviction that it is a worthwhile field of endeavor. But knowledge, interest, and conviction are not enough for competence. It is not merely a matter of deciding to work in historical aspects of our field. With justice, professional his-

torians have been indignant about the bland assumption, all too often made by scientists, that, because one knows something about a scientific field, the essential equipment for historical research automatically is available. Historical work does not consist of finding a few old books and copying this and that. Trained as he is in his own exacting techniques, the psychologist does not always realize that the technique of establishing the truth of the maximum probability of past events, in other words historical research, has its own complicated rules and methods.

There is a variety of areas with which more than a passing acquaintance is necessary if historical study is planned. Knowledge of the methodology of history—historiography—is essential for more than anecdotal familiarity with any area capable of being approached historically. Knowledge of the philosophy of history is also needed by the psychological historian as a defense against errors of procedure and of content. In psychology, as in similar disciplines, acquaintance with the history of science in general is demanded. Moreover, some appreciation of the influence of social and cultural factors in history is important if the findings are to be seen in broad context. I, for one, think it would be worth the trouble and time to secure this background in order to carry on the task of understanding and interpreting our past in the perspective of today.

REFERENCE

- DANIEL, R. S., & LOUTTIT, C. M. *Professional problems in psychology*. New York: Prentice-Hall, 1953.

THE PROBLEM OF MEASUREMENT IN THE PSYCHOLOGY OF THE EIGHTEENTH CENTURY

KONSTANTIN RAMUL

Tartu State University, Estonia, U.S.S.R.

THE rise in the seventeenth century of a new quantitative (Galilean) measuring and calculating physics instead of the old qualitative (Aristotelian) descriptive and classificatory physics and the brilliant successes achieved by the former gradually came to exert an influence also upon other much less advanced branches of human knowledge, including psychology. In the early eighteenth century we may already find the first (though for the most part still very modest) discussions of the question of the measurement of mental phenomena as well as of their mathematical treatment.

PSYCHOMETRY IN THE EIGHTEENTH CENTURY

In the following pages we shall be dealing in approximate chronological order with the hitherto largely unknown opinions of a number of eighteenth century philosophical and nonphilosophical writers regarding the possibilities and methods of psychological measurements. Owing to the general character of the available material concerning this question, it is not possible to present a coherent history of the latter during the eighteenth century.

Christian von Wolff

It would appear that the first in the history of psychology to have dealt at somewhat greater length with the question of the measurement of mental phenomena was Christian von Wolff. The relevant principal passage in his *Psychologia Empirica* (1738, § 522) has been frequently quoted.¹ After formulating his mathematical law concerning the magnitudes of pleasure and displeasure ("Pleasure is proportional to the perfections of which we are conscious, as well as to the certainty of our judgments concerning these perfections," etc.), he goes on to say in a footnote to this paragraph:

These theorems belong to psychometry which conveys a mathematical knowledge of the human mind and continues

to remain a desideratum. It should teach us how to measure the magnitudes of perfection and imperfection and also the certainty of a judgment, and insofar determine the measure of perfection and imperfection as well as the measure of the certainty of a judgment.

Wolff is of the opinion that psychometry possesses not only a theoretical but also a practical significance. The founding of psychometry is, however, no easy task on account of the difficulty of finding a unit of measurement for the properties of the soul. Once such a measure has been established, any adept at mathematics can easily do the rest. Whosoever wishes to tackle the difficult task of founding psychometry successfully must unite in himself competence in philosophy (according to Wolff's method) with an equal competence in the mathematical knowledge of nature.

As regards the actual methods of psychological measurements, Wolff offers only some intimations. Thus he points out (1738, §§ 243-247; 1740, §§ 13, 14), for instance, that the difference in the "magnitude" of attention of different persons finds expression in the ability of one individual to follow attentively a longer argumentation than another. The conclusion may be easily drawn that it is possible to measure "magnitude" of attention in such a case by the length of the argumentation that has been followed attentively (possibly by the number of separate syllogisms it contains). Wolff remarks elsewhere (1737, p. 37) that

A philosopher shows how it happens that when we come across something that is good, we desire it. The expert in measurement goes still further and distinguishes the extent of the good according to certain degrees . . . from which he determines the degree or the magnitude of the desire.

As may be seen, Wolff is thinking in this connection of the possibility of measuring the "degree" of a given desire by means of the magnitude of the good that the desired object represents.

Andrew Michael Ramsay

Only a few years after Wolff had written the statements concerning his "*Psychometria*" in his *Psychologia Empirica*, a short article entitled "*Le*

¹ Other passages occur in: von Wolff, 1737, p. 37; 1738, § 616; 1744, §§ 607, 608, 651. All modern authors who have cited Wolff's remarks on psychological measurements appear to have been familiar only with the two passages in his *Psychologia Empirica*.

Psychomètre ou Réflexions sur les Différens Caractères de l'Esprit, par un Mylord Anglais" appeared in *Mémoires de Trevoux*,² a journal published in France. The author was a Scotchman, Andrew Michael Ramsay, residing in France. One does not find, however, a single reference to mental measurements in the whole of this little work, and it is altogether not clear why the author should have chosen just "*Psychomètre*" for the title of his article.

At the beginning of the article there is indeed the following remark: "This writing is but a translation from English of the compendium of a longer work." Despite protracted efforts the present writer has not succeeded however in finding any traces of the latter.

Of the authors who after Wolff have touched upon the possibilities and methods of measuring mental phenomena, the vast majority have, as Wolff himself, done so very briefly and mostly only by way of passing. Only three writers—Hagen, Körber, and, to a certain extent, Krüger—have dealt with the question of the measurement of mental phenomena in greater detail. We shall begin with the first group.

Alexander Gottlieb Baumgarten

After Wolff we find a few short notes on the measurement and mathematical treatment of mental phenomena in the works of Wolff's follower Baumgarten who became known in Germany mainly through his philosophy of esthetics. Like Wolff he takes a positive view on the question of the measurement of mental phenomena, but prefers the term "anthropometry" to that of "psychometry" (1779, § 747).

Christian August Crusius

The philosopher Crusius, a violent opponent of Wolffian philosophy, has also quite briefly stated his position with regard to the possibility of measuring mental phenomena, albeit in a negative sense. Crusius (1751, pp. 69, 72 f.) believed that, although the "activities of the soul" should stand in the same mutual relation to one another as numbers, we lack, nevertheless, the unit of measurement with

which "to determine their magnitude distinctly each time." That is why numerical examples with regard to mental phenomena can serve only as an "illustration" of an opinion—e.g., the example adduced by Crusius himself: Somebody wakes in the morning and should get up immediately. The efficiency of his image of what he should do being equal to 100, his freedom equal to 20, and his desire to sleep equal to 200, it follows that he will remain lying in bed although he were to sigh over his laziness and his slavery.

Pierre-Louis Moreau de Maupertuis

Besides German authors we can also find references to the possibility of mental measurements in the works of scholars of other nationalities, first of all in those of the well-known French mathematician, Maupertuis, President of the Academy of Sciences in Berlin. Maupertuis has dealt with the measurement of mental phenomena, namely of pleasure and displeasure, only occasionally in connection with certain moral problems. Maupertuis (1751, pp. 2 ff.) calls the span of time during which a pleasure lasts a "*moment heureux*" and the duration of displeasure a "*moment malheureux*," and adds that it does not suffice to consider merely the duration of every "*moment heureux*" or "*moment malheureux*," but one must also consider their intensity. For instance, an intensity of 2 and a duration of 1 can yield the same "moment" as an intensity of 1 and a duration of 2. In general, therefore, the "moment" will be measured in terms of the product of the intensity of pleasure or displeasure and their duration.

But in reality it is impossible to carry out such a measurement accurately: we do indeed possess the instruments with which we can measure duration exactly and independently of our illusions; we cannot, however, say whether the intensity of a pleasure or displeasure amounts to exactly two- or three-fold that of another pleasure or displeasure. We can only "feel" that a pleasure or displeasure is greater than another, this being quite sufficient for practical purposes, e.g., in such cases where we have to decide whether we should or should not prefer a prolonged but weak pleasure (or displeasure) to another that is short, but intense.

Friedrich Johann Buck

We find next some brief references to the measurement of mental phenomena in the works of the

² It is thus that the journal (printed in miniature format) is usually referred to. Its full title is: *Mémoires pour l'Histoire de Sciences et des Beaux Arts, Commencés d'être imprimés l'an 1701 à Trevoux, et dédiés à son Altesse Ser. Monseigneur le Duc du Maine*. The article we are concerned with appeared in the number for April 1735.

mathematician Buck, a colleague of Kant in Königsberg. In an attempt to give a detailed classification of mathematics, Buck (1753) also arrives at the mathematics of the unextended (*mathesis intensorum*) as a branch of "pure" mathematics besides the mathematics of the extended (*mathesis extensorum*) and at "the art of soul measuring" (*Seelen-Messkunst*) or "psychometry" and "the art of spirit measuring" (*Geister-Messkunst*) or "pneumatometry." Psychometry should teach us how to determine the "magnitudes and relations" of souls; pneumatometry, those of finite spirits (p. 225). For souls and finite spirits are also "creatures with magnitude" (*Größenwesen*) capable of being measured. Buck believes (p. 222) that the correctness of this supposition is obviously confirmed by Hagen's (1733) *Specimens of the Measurement of One's Own Powers and Those of Others* and his (1734b) *Measure of the Powers of Understanding and the Will* and Körber's (1746) *Essay on the Measurement of Human Souls*.

Moses Mendelssohn

The possibility of a *mathesis intensorum* and of a measurement of psychological magnitudes is also generally accepted by Moses Mendelssohn, the most eminent representative of German eighteenth-century *Popularphilosophie* (and grandfather of the famous composer). Mendelssohn (1786) says that "There is a natural mathematics of unextended magnitudes." With our "natural common sense" we judge of the degrees of things, make comparisons, comprehend relations; "hence there must also be an artificial mathematics" (p. 26). This artificial mathematics of unextended magnitudes must extend also to the spiritual. The first principles of unextended quantity

should be applicable also to the degrees of truth, certainty, clarity and inner efficiency of our cognition, to the goodness of moral actions, etc., because all these degrees are true quantities and consequently capable of measurement and relative comparison (p. 25).

Nevertheless, a mathematical treatment of unextended magnitudes is fraught with special difficulties (pp. 32, 35, 49).

Gottfried Ploucquet

Among other philosophical writers who have given thought to the possibility of mental measurements, one may further mention Ploucquet, Professor of Philosophy at the University of Tübingen. Plouc-

quet deals especially with the mathematical treatment of intensive magnitudes, including psychological ones, but we can also find some remarks on the measurement of psychological magnitudes.

Ploucquet (1764, 1782) believes, e.g., that the degrees of the intellect can be measured: first, by means of the number of objects imagined; secondly, by means of the distinctness with which the objects are imagined; and, thirdly, by means of the brevity of the time required for distinct imagining. Generally speaking, it should be possible, in Ploucquet's view, to estimate the quantity of the degrees of power through the quantity of their effects on condition that it were possible to determine the total quantity of these powers as well as their effects in a proper manner. It is only extremely seldom, however, that we find ourselves in a position to determine either the quantities of powers or of their effects, since our observations do not provide us with all the data necessary for taking a correct measure. That which is concealed in the forces inherent in matter and that which derives from the powers of the perceiving substances, lie altogether too deep and will never be brought to light (1764, § 145; 1782, §§ 127, 131).

As to what concerns further the mathematical treatment of intensive and thus also of psychological magnitudes, Ploucquet gives special priority to the principle that intensive magnitudes should not be regarded as additional magnitudes. An "intensification" or increase in degree cannot come about as the result of the addition of lower degrees—that is, in the same manner as, e.g., a larger number is obtained by means of the addition of smaller numbers or a larger distance through the addition of shorter distances (1782, § 108, p. 173; § 117, p. 177). A dim light added to another dim light does not result in a bright light (1764, p. 7). It is likewise in the case of psychological magnitudes. An intellect that has no insight of certain truths, added to another intellect lacking the same insight, does not become an intellect possessing such an insight (1782, § 125, p. 181). Generally speaking, it would be quite senseless to say that the intellect of one person is three times greater than that of another or that Intellect A bears the same proportion to Intellect B as a side to the diagonal (1782, § 126, p. 182).³ Indeed, it is possible that

³ Cf., Cohen and Nagel (1934): "It is nonsense to say that the first man has twice the intelligence . . . the other has" (p. 298).

the intellectual faculties of an individual man grow to such an extent that he can form and comprehend six syllogisms in the same time that he earlier managed to form and comprehend only two such syllogisms concerning the same object. It follows hence, however, only that the number of objects of thought in his case is now threefold what it was before and not that his intellectual faculties themselves have trebled: because an intellectual faculty that has been trebled would constitute a power and another power and yet another power which added together would make up something which three times repeated three times would still be incapable of comprehending six syllogisms. This, however, does not represent any advance in knowledge: "Whether I am once or thrice incapable of comprehending something, I remain equally ignorant of the truth" (p. 182).

In order to avoid misunderstandings in the matter of differences of degree, one must always distinguish the causes producing a degree from the form of that degree (p. 179). Although, for instance, several rays of light taken together impart a stronger movement to the eye and there is a correspondingly stronger perception, this does not prove that a higher degree arises from the addition of lower degrees (p. 180), because what is perceived in the actual seeing of the stronger light is not the perception of a weaker light and yet another weaker light (p. 179).

Charles Bonnet

It was at approximately the same time as Ploucquet that the well-known Swiss philosopher and naturalist Bonnet also expressed himself on the possibility of mental measurements. His remarks in this connection are of interest as something in the nature of an anticipation of modern intelligence testing. Bonnet (1781a) finds that there are very many and very significant differences between individuals and adds:

Just see how many conclusions a mathematician draws from a single very simple principle. Hand the same principle to the man in the street and he will remain sterile and not produce even the smallest truth. Could not the number of correct conclusions that different minds draw from the same principle become the basis for the construction of a *Psychomètre*, and is it not possible to presume that one day minds will be measured in the same way as bodies (p. 200).

On another occasion Bonnet (1781b) expresses the conjecture that the number of characteristic fea-

tures distinguishable by a person in an object might serve as the measure of intelligence:

The greater depth a genius possesses, the more can he decompose an object. The number of these decompositions may be the principle underlying the graduation of the scale of intelligences (p. 292).

Hans Bernhard Mérian

It was shortly after Bonnet that another Swiss scholar, Mérian, who was working at the time at the Berlin Academy of Sciences, took up the question of the measurement of mental phenomena. He did this in an article (Mérian, 1766)⁴ dealing with the duration and intensity of pleasure and displeasure. Mérian maintains that we have no measure of the intensity of our sensations. It is likewise with the feelings of pleasure and displeasure. We know that one feeling is stronger than another, but we cannot say that one pleasure is double or treble, one half or one third that of another. Mérian goes on to say:

This knowledge belongs to a science that is lacking, but which will be the masterpiece of the human spirit once the latter attains it, and which we shall call psychometry after it has been discovered (p. 390).

Johann Heinrich Lambert

The well-known German philosopher, physicist, astronomer, and mathematician Lambert has also dealt with the possibility of a more accurate measurement of mental phenomena. Lambert's (1771) reasoning is briefly as follows. The will or "faculty of desire," which has good for its object, allows itself to be influenced by images, sensations, and drives and possesses thereby a power of inertia (*vis inertiae*) and as if a direction and speed. This shows

that the theory of solidity, of motion and power, presents frequent *tertia comparationis* [points of comparison] also in relation to the will. . . . Upon proceeding with greater accuracy, it is not impossible to develop these *tertia comparationis* further and make them the basis of measurement, thus transforming Agathology [the doctrine of the Good which constitutes the object of the will] into a genuine Agathometry and rendering this science truly perfect without which it would continue to lag far behind (§ 110, p. 81).

⁴The work referred to by H. Lähr under the year 1760 in his book (1900) as Mérian, *Psychométrie, Chef d'Oeuvre de l'Esprit Humain* does not exist, and its title is apparently only a combination based on a misunderstanding of the (partly erroneous) reference in M. Dessoir (1902, p. 366).

Johann August Eberhard

A decidedly negative view regarding the possibility of mental measurements is taken by the philosopher Eberhard, who is known as one of the opponents of Kantian philosophy. Eberhard (1786, pp. 61 ff.) is of the opinion that a power can be measured by the number of effects it is capable of evoking, and an "imagining power" (*Vorstellungskraft*) could be measured by the number of diverse objects it is capable of imagining simultaneously. At the same time Eberhard believes that every greater degree can be thought of as the sum of several lesser degrees.

Despite such statements Eberhard's hypothesis of the fundamental stuff of images leads him then to reject the possibility of measuring mental phenomena. According to this hypothesis every conscious image consists of a large number of little, separately imperceptible images (much in the manner of Leibniz' *petites perceptions*) which make up the "fundamental stuff" of conscious images. "The comparison," Eberhard goes on to say, "of the magnitude of these [i.e., conscious] images amongst themselves according to this assumed fundamental stuff of theirs would lead us to a mathematics of the soul." However, since in comparing images amongst themselves, the unit of measurement should be an imperceptible image unfit for this purpose precisely on account of its being imperceptible, a "mathematics of the soul" is likewise not possible. When comparing sensation with thoughts, we have, moreover, completely different quantities which are by no means commensurable.

Gottlieb Friedrich Hagen

As has already been said, only three authors—Hagen, Krüger, and Körber—have dealt more particularly with the measurement of psychological magnitudes. Hagen, who was Adjunct Professor in the faculty of philosophy at Halle between 1731–1737 and who was a follower of Wolff, deals with the question of mental measurements in three small special works which came out within two years after the publication of the first edition of Wolff's *Psychologia Empirica* in 1732.

Especially noteworthy is Hagen's position as regards the question of psychological experiments. According to Hagen (1734a) there are two kinds of experiments: *experimenta physica* and *experi-*

menta psychologica. It would be a psychological experiment, for instance, if somebody were to seek to evoke fear in another person by depicting various imminent evils threatening him and observing at the same time what effect this would have and whether the other person feels inclined to fear or not (§ 37). As the human soul is a simple one that is provided with both intellect and will, it is obvious that some psychological experiments refer to the intellect and others to the will (§ 40). Psychological experiments are of importance for everybody, both for the investigation of oneself and for the knowledge of the minds of others. In the latter case they can be constantly employed and constitute a reliable principle for observations (§ 41). Although psychological experiments represent something new and have been hitherto investigated by very few persons only, and undoubtedly appear fantastic to some who have learnt to *jurare in magistrorum verba*, they must, nevertheless, not be regarded as absurd (§§ 38, 41).⁵

Hagen (1733) has the following observations to make concerning the actual measurement of mental powers. In order to effect a better comparison of the powers of different persons, all such powers must be dealt with under a common denominator (§§ 11–13). The unit of measurement may be either larger or smaller than the quantity being measured. It is more advisable to employ the first procedure when measuring our own powers and to estimate them according to how much we still lack, according to the extent of what we do not know and what we do not desire. An analogy with such a measurement by means of something larger may be found in the measurement of the smaller angles by the circumference as a whole (§§ 5–7). As to the separate faculties of the soul, they could be measured in the following manner:

The magnitude of attention could be measured by the number of ideas one is capable of thinking about and by the duration of the time during which

⁵ These remarks of the long forgotten Halle Adjunct Professor on the psychological experiment are especially noteworthy when one considers the time they were made and when one compares them, e.g., with the well-known remarks on the same subject made by the famous Königsberg philosopher 52 years later: "Even as an experimental discipline it [psychology] can never expect to match chemistry . . . because . . . no other thinking subject can be subjected to our experiments in accordance with purpose. . . . It cannot therefore . . . even become a psychological experimental discipline" (Kant, 1786, Preface).

one is capable of contemplating an idea continuously and decomposing it (i.e., keeping the parts of the idea separated) (§ 12).

The faculty of judgment could be measured by the speed with which one discovers hidden similarities and by the "degree of concealment" of these similarities (§ 13).

In the case of reason, the degree of its perfection is expressed by the degree of confidence with regard to demonstrations. The lowest degree of the perfection of reason lies therefore in the comprehension of demonstrations; the next highest, in their imitation; the highest, in the independent invention of demonstrations, especially when the latter are complicated (§ 14).

The following may serve as an example of the measurement of the "natural powers" of the intellect. One wishes to determine the natural powers of two boys to learn history. For this purpose an historical event hitherto unknown to them is narrated to them with all historically relevant details such as proper names, dates, natural sequence, etc. Then each boy has to reproduce the event or at least as many of its "points" as he has retained. This procedure is repeated until both boys know the event thoroughly. In this way it will be possible to determine which of the two possesses greater intellectual powers and powers of attention in particular. The measure of the natural powers is given here by means of the speed of activity and the number of individual acts accomplished: the smaller the number of repetitions, the greater the speed. The number of "points" retained after the first, second, third, etc. repetition will reveal what one likes in particular and show for what one has more inclination. This experiment must be carried out several times before it is possible to determine the measure of the natural disposition of either boy (Hagen, 1734b, pp. 4 ff.).

It is much more difficult to measure acquired powers than the natural powers of the intellect. The derivation of formulas for the measurement of the former is bound up with special difficulties which it is the business of the mathematician to solve (1734b, p. 5). This much about the measurement of the powers of the intellect.

With regard to the measurement of the powers of the will, Hagen (1733, §§ 15-17) has the following to say: The will is the faculty of desire (*Begehrungsvermögen*), and its origin lies in the

idea of what is good and evil for us. In order to measure the will it is therefore necessary to measure first the kind of desire: i.e., how clearly the desired object has been contemplated and with what degree of consideration the resolutions to act have been taken. One must further measure the degrees of the passions and the number of their causes. It follows that a person's will is the more perfect the more he considers before his actions, the less he is carried away by a passion, and the more circumspectly he controls his passions. As regards his will it is also possible to measure how many good things are desired and how many bad things are detested by somebody. The smaller the number of good things one desires the more remote one is from virtue and vice versa.

In the main such mental and moral measurements lack precision since a complete understanding of man requires a comprehension of the whole structure of the universe. But nothing prevents us from gradually striving after greater accuracy in these measurements as well, especially by means of diligent exercise (1733, § 26). Anyone capable of comprehending the highest degree of human perfection is qualified (without much additional study) to carry out such measurements, and the latter may be employed both in the case of the powers of nature (inborn or acquired) and the powers of grace (§§ 22, 27). Objectivity is necessary, however, for more accurate measurement (§ 20).

Johann Gottlieb Krüger

Krüger, who was Professor of Medicine at Halle, dealt only with the problems of the measurement of sensation. Krüger (1743) maintains that sensation arises from the vibrating movement of the nerve membranes and that, since effect is always proportional to cause, sensation must be the stronger and more lively the more violent the vibrating movement of the nerve membranes (p. 568). But the violence of the vibrating movement of the membranes of the nerves depends, firstly, on the force of the body that causes the movement and, secondly, on the tension of the nerves (p. 569).

If we denote the sensations as S and s , respectively, the force of the corresponding bodies as V and v , and the tensions of the corresponding nerves as T and t , then:

$$\frac{S}{s} = \frac{VT}{vt}$$

If $T = t$, then:

$$\frac{S}{s} = \frac{V}{v}$$

that is, if the tensions of the nerves are equal, then the sensations bear the same proportion to each other (in respect of their strength) as the forces of the bodies that have caused them (p. 571). Thus, e.g., the sensation of the sound of different musical instruments is proportional to the number of the instruments (assuming that the loudness of the individual instruments is equal) when the tension of the nerve membranes is the same (p. 572). Likewise, when the skin is stimulated by falling bodies, the sensation is proportional to the height from which a body falls (on condition that the tension of the nerves remains the same) or proportional to the weight of the falling body when the height of the fall remains the same but the weight differs (p. 573). Consequently, Krüger presupposes that the intensity of sensation increases, other things being equal, simply in proportion to the increase of the corresponding stimulus; whence it follows that the intensity of a sensation may be measured directly (under certain conditions) by means of the strength of the stimulus.⁶

Christian Albrecht Körber

Körber, who styled himself *Philosophiae Magister*, was like Hagen also a follower of Wolff, and appears likewise to have lived in Halle, has dealt with the methods of mental measurements in even greater detail than Hagen. His relevant work, which to the present writer's knowledge is the most complete treatise on mathematical or quantitative psychology prior to Herbart's time, is entitled *An Attempt to Measure Human Souls and All Simple Finite Things in General*, etc. (1746). Körber's general theoretical position is rather confused, his treatment partly clumsy, his terminology frequently peculiar, and his whole work teems with typographical errors. It is therefore not always easy to follow his reasoning. If we leave aside the philosophical background of Körber's disquisition, the substance of his *Measurement of Human Souls* amounts to the following.

⁶ Krüger, too, has made noteworthy references to the psychological experiment. But his 1756 *Versuch einer Experimental-Seelenlehre* does not yet contain anything that could be regarded as "experimental psychology" in the present-day sense.

Körber regards the measurement of sensations, images, attention, and abstraction to be his immediate task. He maintains, however, that his treatise is of such a nature that it may serve instead as a general introduction, making it possible for measurements of the remaining special kinds of actions of human souls and their other faculties to be carried out with ease (1746, Preface). The measurement of the intensity of mental phenomena or—in Körber's terminology—of the "clarity of ideas" consists on the whole in the comparison of the degree of one clear idea with that of another. Such a comparison is possible only with respect to similar ideas—e.g., separate auditory sensations (Part 2, pp. 180 f.). Since mental phenomena correspond to changes in the material world, the measurement of human souls cannot be carried out without a knowledge of the "science of motion" (pp. 171 f.).

With regard to the measurement of sensations in particular Körber has the following to say. If one overlooks all the different variable conditions, the intensity of sensations depends, firstly, on the intensity of the impact given to the sensory organ and, secondly, on the ability of a given person to observe differences. The intensity of the impact received by the sensory organ is determined according to the formula MC —where M denotes mass; and C , speed. For instance, in the case of hearing M stands for the mass of air which produces the impact in the ear (this mass decreases in the open air with the distance from the source of the sound—namely, in proportion to the square of that distance), and C denotes the speed of sound. In order to compare the ability of two individuals to observe differences, one must compare the slightest impacts on their sensory organs which still produce "clear ideas." In the case of hearing, for instance, it is sufficient to measure the distances at which one person or another can still hear the speech of a third person—their abilities to differentiate will be in inverse proportion to those distances. One should proceed in a similar manner when comparing the ability to observe differences in the case of vision (pp. 185 ff.).

The "science of motion" also presents us with the key to the measurement of the effects of attention. In Körber's view the latter is nothing but an "intensified clarity of ideas," conditioned by the fact that our thoughts, feelings, wishes, etc. also exert on their part an accelerating influence on the

movement of the nerve fluid in certain nerves, such a movement having been caused beforehand by certain influences—e.g., the speech of a given person (pp. 234 ff.). It is a result of this accelerated movement that the corresponding ideas—e.g., the words heard—acquire an ever-greater degree of clarity in our consciousness, as long as no greater resistance arises to this movement. It is therefore generally possible to apply the same formula for the determination of the effect of attention as applies in the case of the uniformly accelerated movement: i.e., when the degree of clarity attained by an idea by the end of the first part of a given span of time is, e.g., C , then the degree of its clarity at the end of the second period will be $2C$; at the end of the third period, $3C$; etc. (p. 257). It follows that a human being with a lesser "faculty of sensation" can attain a greater "clarity of ideas" after a longer duration of attention than one with a greater "faculty of sensation" but a shorter duration of attention (p. 265).

Compared with his discussion of the measurement of sensations and the effects of attention, we find far less that is definite in Körber's treatment of the measurement of images and abstraction, which (as we have already seen) he likewise considers to be his business to discuss. As regards images, Körber deals first of all with the question of their clarity in comparison with the clarity of sensations. He does this on the basis of a comparison (aided by hypothetical calculations) of the "impacts" and "resistances" that correspond to both kinds of "ideas."⁷ He also touches upon some other problems (1746, Contents): e.g., "which people have a stronger imaginative faculty" (§ 179), "in what circumstances can a high degree of the faculty of sensation and imagination be excited" (§ 181), etc. At the same time we learn next to nothing about the actual measurement of images. Finally, as to the measurement of abstraction, Körber confines himself to the following sentence (in bold-faced type):

The more easily . . . and more quickly sensation and phantasy can imagine without confusion and with the necessary attention different things simultaneously or successively, the greater is the faculty of abstraction by means of which general ideas are attained (Part 2, p. 273).

⁷ In Körber's view the corresponding sensory organ also receives an "impact" from within in the case of an image—e.g., the eye in the case of a visual image.

OVERVIEW

It is highly probable that, in addition to the statements by eighteenth century authors concerning the possibilities and methods of psychological measurements that have been referred to above, there are others by the same or different authors which have remained unknown to the present writer. But even the data we have presented should enable us to draw some general conclusions regarding the status of the problem of psychological measurements in the eighteenth century.

1. The question of the measurement of mental phenomena did not by any means remain alien to the inquiring genius of the eighteenth century. However, one still refers to the problem more or less occasionally in connection with certain other questions, and only some authors have devoted more attention to it.

2. The bulk of what we can find in the works of individual authors on the measurement of mental phenomena still consists of their personal "ideas." A certain continuity in the development of these thoughts may be found to some extent only among the representatives of the Wolffian school (Baumgarten, Hagen, Körber, Buck) and partly elsewhere (Mendelssohn and, possibly, Mérian).⁸ Such personal "ideas" concerning the possibilities of mental measurements were almost inevitable in a scientific and philosophical atmosphere so saturated with mathematics as was that of the eighteenth century.

3. The raising of the problems of mental measurements as well as the attempts to solve it in the eighteenth century still clearly reflect the general condition of psychology at the time as well as its dominant general theoretical standpoints (above all the standpoint of faculty psychology).

4. Very much of what the eighteenth century philosophers and psychologists had to say about the measurement of mental phenomena is very naive from the point of view of present-day scientific psychology, but the contemporary psychologist may also find something here that can be regarded as a certain anticipation of modern insights.

5. It is noteworthy that of all the authors who have discussed the methods of mental measurements not a single one, not even Hagen and Körber, who

⁸ It is interesting to note in this connection that there is not a single reference in the whole of Körber's book to Hagen, although the latter was Körber's direct predecessor in the treatment of the problem of mental measurements and lived in the same city.

have illustrated their statements with concrete examples, has made an attempt to carry out any actual measurements.⁹ One of the results of such a theoretical attitude of the psychologists of the eighteenth century is that by far the larger part of the psychological measurements known to us from that time (first and foremost a series of measurements of such elementary phenomena as visual acuity, the size of the blind spot, the duration of visual afterimages, etc.) have been carried out not by psychologists (or philosophers) but by naturalists.¹⁰ And thus the program of a special measuring psychological discipline or psychometry remained wholly on paper in the eighteenth century. Anybody dealing with psychometry could not avoid realizing that the gulf between the idea of such a science and the conceivable means of its realization was still far too great at the time. This is why psychometry appears to have merely played the role of a blind window in the façade of the entire scientific edifice of those authors who dealt with it—e.g., Baumgarten, Buck, or partly also in the case of Wolff himself.

6. If we finally raise the question of the importance of the repeated discussions of the question of mental measurement in the eighteenth century for the following development of scientific psychology in the nineteenth century, the answer would be: it had hardly any importance whatever. Most of what was written before Herbart's time about a measuring and computing psychology appears to have either attracted but slight attention in the general flood of the philosophical literature of the period or to have been irrevocably forgotten a few years after its publication. As we have seen, Wolff's psychometry constituted an exception. But after the decline of Wolffian philosophy in the second half of the eighteenth century, it, too, seems to have been more or less consigned to oblivion. This explains why the impression could easily arise later on that nothing whatever had taken place in

the field of the measurement and mathematical treatment of mental magnitudes before the period of Herbart and Fechner. Thus, for instance, Drobisch, the most eminent Herbartian and the continuer of Herbart's work in mathematical psychology, writes: "Who before Herbart had as much as a presentiment that mathematics would find a sphere of action in psychology" (1850, Preface, p. vi)? Fechner (1907, Foreword, p. xii) and Ziehen (1911, pp. 15 ff.) later expressed themselves in a similar vein. But even today it is possible to come across such statements.

7. It is not difficult to see the principal reason why the "psychometry" of the eighteenth century was so short-lived. Despite the significant development in the second half of that century—above all in Germany—of an empirical psychology (known as *Erfahrungsseelenlehre* in Germany), scientific psychology in the eighteenth century remained to the end a highly speculative armchair psychology; and it was, therefore, still too immature scientifically for the acceptance and practical application of the idea of a measuring and computing psychology. Very important changes had to take place in psychology before the vague dreams of a Bonnet or a Mérian regarding a "psychometry" could be realized to a certain extent.

REFERENCES

- BAUMGARTEN, A. G. *Metaphysica*. (7th ed.) Halle-Magdeburg: 1779. (First edition, 1739.)
- BONNET, C. *Contemplation de la nature* (1764). In, *Collection complète des oeuvres*. Vol. 7. Neuchatel: 1781. Chap. 10, Part 4. (a)
- BONNET, C. *Principes philosophiques sur la cause première et sur son effet*. In, *Collection complète des oeuvres*. Vol. 17. Neuchatel: 1781. Chap. 5, Part 6. (b)
- BUCK, F. J. *Zufällige Gedanken von der Erklärung und Eintheilung der Mathematik überhaupt*. Königsberg: 1753. (Printed also in C. E. von Windheim, *Philosophische Bibliothek*. Vol. 8. Hanover: 1775. P. 218.)
- COHEN, M. R., & NAGEL, E. *An introduction to logic and scientific method*. New York: 1934.
- CRUSIUS, C. A. *Anweisung vernünftig zu Leben*. (2nd ed.) Leipzig: 1751. (First edition, 1744.)
- DE MAUPERTUIS, P.-L. M. *Essai de philosophie morale*. Leiden: 1751.
- DESSOIR, M. *Geschichte der neueren deutschen Psychologie*. Vol. 1. (2nd ed.) Berlin: 1902.
- DROBISCH, M. W. *Erste Grundlehren der mathematischen Psychologie*. Leipzig: 1850.
- EBERHARD, J. A. *Allgemeine Theorie des Denkens und Empfindens*. (Corrected ed.) Berlin: 1786. (First edition, 1776.)
- ⁹ The titles of Hagen's works given in German by Buck, *Proben von dem Messen der eigenen und der fremden Kräfte*, etc., are in all probability only approximate translations of the corresponding Latin titles. At any rate the present writer has not succeeded in finding any *Proben* by Hagen in the German language.
- ¹⁰ However, the situation where most psychological or psychologically relevant experiments and measurements were carried out not by psychologists but by naturalists continued, as is known, into the second half of the nineteenth century.

- FECHNER, G. T. *Elemente der Psychophysik*. Part 1. (3rd ed.) Leipzig: 1907.
- HAGEN, G. F. *Dissertatio mathematica de mensurandis viribus propriis atque alienis*. Giessen: 1733.
- HAGEN, G. F. *Meditationes philosophicae de methodo mathematica*. Nürnberg: 1734. (a)
- HAGEN, G. F. *Programma de mensurandis viribus intellectus*. Halle-Magdeburg: 1734. (b)
- KANT, J. *Metaphysische Anfangsgründe der Naturwissenschaft*. 1786.
- KÖRBER, C. A. *Versuch einer Ausmessung menschlicher Seelen und aller einfachen endlichen Dinge überhaupt, Wie solche der inneren Beschaffenheit derselben gemäß ins Werck zu richten ist, Wenn man ihre Kräfte, Vermögen, und Wirkungen recht will kennen lernen*. Halle: 1746. 3 parts.
- KRÜGER, J. G. *Naturlehre*. Part 2. Halle-Magdeburg: 1743.
- LÄHR, H. *Die Litteratur der Psychiatrie, Neurologie, und Psychologie von 1459-1799*. Berlin: 1900.
- _____, J. H. *Anlage zur Architectonic oder Theorie des Einfachen und des Ersten in der philosophischen und mathematischen Erkenntnis*. Vol. 1. Riga: 1771.
- MENDELSSOHN, M. *Abhandlung über die Evidenz in metaphysischen Wissenschaften*. (2nd ed.) Berlin: 1786.
- MÉRIAN, H. B. Sur la durée et l'intensité du plaisir et de la peine. In, *Histoire de l'Académie Royale de Sciences*. Vol. 22. *Memoires de l'Académie . . . classe de philosophie expérimentale*. Berlin: 1766.
- POUCQUET, G. *Principia de substantiis et phaenomenis: Accedit methodus calculandi in logicis . . . cui praemittitur commentatio de arte characteristica*. Frankfurt a. Leipzig: 1764.
- POUCQUET, G. *Expositiones philosophiae theoreticae: Ontologia*. (Last ed.) Stuttgart: 1782.
- VON WOLFF, C. *Gesammelte kleine philosophische Schriften*. Part. II. Halle: 1737.
- VON WOLFF, C. *Psychologia empirica*. (2nd ed.) Frankfurt a. Leipzig: 1738. (First edition, 1732.)
- VON WOLFF, C. *Philosophia rationalis*. Frankfurt a. Leipzig: 1740.
- VON WOLFF, C. *Philosophia practica universalis*. Part I. Halle: 1744.
- ZIEHEN, T. *Das Verhältnis der Herbartischen Psychologie zur physiologisch-experimentellen Psychologie*. (2nd ed.) Berlin: 1911.

APPLICANTS FOR FELLOW STATUS: 1961

LISTED below are the names of 112 Members of the APA who are applying for Fellow status, together with the names of the divisions (in italics) through which they are applying. In accordance with Council action of 1958, some of the divisions have instituted an invitational system, in whole or in part. However, no differentiation is made in the list below.

Members are invited to transmit information concerning the qualifications of these applicants both to the appropriate division and to the APA Membership Committee.

No final action has been taken on these applications by the divisions, nor by the APA Membership Committee. All applicants listed are applying for Fellow status for the first time through the indicated divisions. Not included on this list are persons already Fellows in the APA who may be applying for Fellow status in additional divisions, nor persons whose names have been previously published as applicants.

It is from this list (plus certain applicants who are reapplying) that the divisions, by August 1, 1960, will make their preliminary nominations to the APA Membership Committee. At the APA Annual Convention in

September 1960, each division will submit its final list of nominees after the divisional business meeting. These final recommendations, together with recommendations from the APA Membership Committee, will be considered by the Board of Directors; a list of Members recommended for transfer to Fellow status will then go from the Board to the Council of Representatives for vote. Fellow status for those elected will become effective January 1, 1961.

The deadline for filing applications for initial Fellow status, whether at the initiative of the Member or by invitation from a division, was January 1, 1960. If procedures remain the same, the deadline for those to be considered in September 1961 will be January 1, 1961. By that date, a copy of the Uniform Fellow Blank will need to be filed with the APA Central Office (addressed to the attention of the Membership Committee), either by the applicant or by the division that issued an invitation. The necessary blanks and instructions must be obtained from the appropriate division secretary (listed on the inside back cover of the November 1959 *American Psychologist*).

- | | |
|---|---|
| Adelson, Joseph, <i>SPSSI</i> | Fisher, Seymour, <i>Personality and Social</i> |
| Allinsmith, Wesley, <i>SPSSI</i> | Fishman, Joshua A., <i>SPSSI</i> |
| Astrachan, Myrtle A., <i>Clinical</i> | Freedman, Mervin B., <i>SPSSI</i> |
| Barbe, Walter B., <i>Educational</i> | French, John R. P., <i>SPSSI</i> |
| Bartelme, Phyllis F., <i>NCPAD</i> | Furchtgott, Ernest, <i>Experimental</i> |
| Barthol, Richard P., <i>SPSSI</i> | Garrison, Karl C., <i>Educational</i> |
| Bauer, Raymond A., <i>SPSSI</i> | Gibson, Wilfred Alan, <i>Evaluation and Measurement</i> |
| Beller, Emanuel Kuno, <i>Developmental</i> | Gold, Douglas, <i>Counseling</i> |
| Biber, Barbara, <i>SPSSI</i> | Greenfield, Norman S., <i>Clinical</i> |
| Borow, Henry, <i>Counseling</i> | Gregg, Lee William, <i>Experimental</i> |
| Calvin, Allen David, <i>Experimental</i> | Haire, Mason, <i>SPSSI</i> |
| Campbell, Donald T., <i>SPSSI</i> | Hall, Robert Collier, <i>Counseling</i> |
| Canter, Arthur, <i>Clinical</i> | Harding, John S., <i>SPSSI</i> |
| Cantoni, Louis J., <i>Maturity and Old Age</i> | Havighurst, Robert James, <i>Developmental, Educational</i> |
| Chapman, Dwight W., <i>SPSSI</i> | Hollander, Edwin Paul, <i>Personality and Social</i> |
| Chapman, Robert L., <i>Military</i> | Hudson, Bradford B., <i>SPSSI</i> |
| Chevrier, Jean-Marc, <i>NCPAD</i> | Hyman, Marvin, <i>Clinical</i> |
| Chin, Robert, <i>SPSSI</i> | Jacobson, Eugene H., <i>SPSSI, Industrial and Business</i> |
| Cohen, Bertram D., <i>Clinical</i> | Jex, Frank B., <i>Educational</i> |
| Cohen, Edwin, <i>General, Evaluation and Measurement, Industrial and Business</i> | Kagan, Jerome, <i>Developmental</i> |
| Comrey, Andrew L., <i>Evaluation and Measurement</i> | Kahn, Robert Louis, <i>SPSSI</i> |
| Cynamon, Manuel, <i>Evaluation and Measurement</i> | Kavruck, Samuel, <i>Counseling</i> |
| Danskin, David G., <i>Counseling</i> | Kosofsky, Sidney, <i>Clinical</i> |
| Davis, Stanley Edward, <i>Counseling</i> | Kuenzlie, Alfred E., <i>SPSSI</i> |
| Deutsch, Martin, <i>SPSSI</i> | Lachman, Sheldon J., <i>Experimental</i> |
| Di Vesta, Francis J., <i>Educational</i> | Lazar, Irving, <i>SPSSI, NCPAD</i> |
| Douvan, Elizabeth, <i>SPSSI</i> | Levin, Harry, <i>Developmental</i> |
| Dunham, Charles V., <i>Industrial and Business</i> | Levine, David, <i>Clinical</i> |
| | Lore, James Irvin, III, <i>NCPAD</i> |

- Luski, Margaret Barron, *SPSSI*
Maccoby, Eleanor E., *Developmental, Personality and Social, SPSSI*
Masling, Joseph M., *Clinical*
McClelland, William A., *Military*
McFann, Howard, *Military*
McLean, Orison S., *Clinical*
Mehlman, Benjamin, *Clinical*
Michels, Kenneth M., *Experimental*
Mitchell, Philip H., *Military*
Munger, Paul F., *Counseling*
Neimark, Edith D., *Experimental*
Nettler, Gwynn, *Personality and Social*
Neugarten, Bernice L., *Personality and Social, Maturity and Old Age*
Parnicky, Joseph J., *Clinical*
Peña, Cesareo D., *Clinical*
Pepitone, Albert, *Personality and Social*
Powell, Marvin, *Educational*
Proshansky, Harold M., *SPSSI*
Raven, Bertram H., *Personality and Social*
Reilly, Margaret Mary, *Teaching, Personality and Social*
Reznikoff, Marvin, *Clinical*
Riopelle, Arthur J., *Experimental*
Ritter, Anne M., *Clinical*
Roa-Ché, Miriam Haines, *Clinical, School*
Robinowitz, Ralph, *Clinical*
Rock, Irvin, *Experimental*
Rosenberg, Selig, *Clinical*
Rosenberg, Seymour, *Personality and Social*
Schlosser, John R., *Clinical*
Schutz, Howard G., *Experimental*
Sherman, Lewis Joseph, *Clinical*
Siegel, Arthur I., *Military*
Siegel, Laurence, *General, Evaluation and Measurement, Industrial and Business*
Silverman, Herbert, *Clinical*
Smith, Robert Griffin, Jr., *Military*
Smith, William Milton, *Experimental*
Sorenson, Herbert, *Educational*
Speth, Edward W., *Clinical*
Spiker, Charles Calvin, *Developmental*
Sundberg, Norman D., *Clinical, Counseling*
Teel, Kenneth S., *Industrial and Business*
Thurlow, Willard R., *Experimental*
Tolbert, Elias L., *Counseling*
Vinson, David B., *Clinical, Military*
Watson, Jeanne, *SPSSI*
Waxenberg, Sheldon E., *Clinical*
Webster, Harold, *SPSSI*
Weinstein, Sidney, *Experimental*
White, Ralph K., *SPSSI*
Wike, Edward L., *Experimental*
Wilkin, Wendell R., *Clinical, Military*
Wilner, Daniel M., *SPSSI*
Wolf, Irving, *Clinical*
Wolman, Benjamin B., *Clinical*
Zimet, Carl N., *Clinical*

Comment

Testing in State Hospitals

The comment by Hauck (1959) provides an opportunity to examine some assumptions and assertions of various psychologists in and out of state hospital service. The presentation provides an ideal opportunity particularly because many of the issues presented are moot.

Not the least of the disagreement with the comment is on the very basis of the apparently underlying assumption that there is at this time a consensus which could provide a program on which psychologists in state hospitals could agree and that such agreement would be healthy. Hauck states that "The most outstanding finding yielded in the survey is the diversity of methods employed to carry out the same duty" and seems to view this as an unfortunate state of affairs. But diversity is seen by many leading psychologists to be a duty at this time in our history, and any attempt to impose limitations other than ethical ones on the profession are met with determined resistance at all levels. Hauck also seems to contradict himself or be inconsistent later in his comment when he says that "The time is rapidly approaching when our present practices will be so well ingrained that they may be nigh to impossible to change without annoying consequences resulting first." Indeed, the very diversity of approaches which is decried is the best insurance against such a result. Of course, if our present practices were acceptable to Hauck, he would not be alarmed about them becoming ingrained. There is no need to belabor the issue; most psychologists would agree to disagree on a unitary approach to mental health problems at least at our present stage of knowledge.

A plea for the clinical psychologist to hang on for dear life to the one thing which makes him a unique member of the psychiatric team, viz., psychological testing, was voiced in these same pages more than a year and a half ago. At that time Carson (1958) voiced the fear that "unless a fundamental change of attitude toward diagnostic testing is effected in many of our training centers, clinical psychology as a profession must eventually suffer." This point of view was later attacked by Sines (1958). Hauck and others of his convictions might do well to read Carson's letter and Sines' rebuttal. Perhaps it is valuable that the issue does crop up again and again in these pages in order that divergent viewpoints on this matter be aired frequently and psychologists in general be reminded

that the controversy exists. Sines specifically questions the assumption which Hauck takes for granted that "the service function (treatment?) is implemented, facilitated, or benefited as a result of the psychodiagnostic activity (testing) of psychologists" and asks: "what is the available evidence that the psychodiagnostic activity (testing) of psychologists materially benefits or expedites other aspects of the service function of workers in the field?" [The quotes are from Sines.]

The statement is made that an ethical question arises as to the right of a man to forego his training and experience and ignore one of the important reasons for which he was hired. One suspects a tongue-in-cheek attempt to provoke discussion, but the remark will be accepted as made seriously to make a point here. It is just not possible to make a valid general statement such as: "The psychologist was originally asked to join the psychiatric team because his tests were a valuable addition." While it may be true that most psychologists were originally hired in state hospitals to be psychometricians, it is very likely that some psychologists were hired for other reasons at the same time; and it is certainly the case now that some if not many psychologists are hired and "asked to join the psychiatric team" with neither expectation nor desire that they confine themselves to tests, nor, indeed, that they use tests at all. Nor is the implication that the training of the psychologist consists only in testing accurate or acceptable.

"If our tools truly aid in the study of human behavior, we err to ignore them . . ." (Hauck, 1959). But the tools available to the psychologist range through a wide field including tests but also including interviews, therapy, and even the administration of ward programs in state hospitals, to name a few. Patterson (1959, pp. 225-226) among others has pointed out that treatment is not at all or very slightly related to diagnosis, so clinging to this use of testing might be disadvantageous for psychology. If psychologists do confine themselves to tests and become too closely identified with them, they may suddenly find themselves without function in working with emotionally disturbed humans if it is finally decided that personality testing is invalid or irrelevant or both and that the limited amount of psychological testing necessary can be better performed by psychometricians employed perhaps by the United States Employment Service.

REFERENCES

- CARSON, R. The status of diagnostic testing. *Amer. Psychologist*, 1958, 13, 79.
- HAUCK, P. A. Psychological testing policies in seventeen midwestern state hospitals. *Amer. Psychologist*, 1959, 14, 522-523.
- PATTERSON, C. Counseling and psychotherapy: Theory and practice. New York: Harper, 1959.
- SINES, L. On Carson's comment re diagnostic testing. *Amer. Psychologist*, 1958, 13, 601-602.

JAMES E. WOODS
Champaign, Illinois

I can certainly agree with Woods on one point: namely, that the issues I raised are moot. On the remaining issues I find that I disagree or that I did not in fact raise the question. I suspect that Woods has some strong opinions in this area and used my comment as a vehicle to express them. An example of this may be found in the paragraph near the end of his comment in which he questions the value of diagnosis for treatment. This is precisely the sort of thing I would agree completely on with Woods, and I regret that I either failed to make my position clear or that Woods failed to detect my views. In centering my survey around the question of diagnosis, I made no statements concerning the value of diagnosis. I took the practice of doing diagnoses in our settings as an empirical fact and tried to see how each department was dealing with it, albeit, the diagnostic question, as we know it today, has serious limitations. It was exactly this sort of blindness to such basic issues which I felt my survey pointed to.

In his comment, Woods shows the same dissatisfaction with basic issues that I found. Certainly his concern for the validity of the underlying assumptions of specific disease entities in personality maladjustment reflects the sort of critical thinking I found lacking in my survey. And I am sure that, were he in charge of a psychology department, he would conduct it according to the demands placed on him by these basic assumptions, much as I feel should be done. And it is this adherence to the essentials that would make our procedures basically similar. True, there would always be diversity between our departments. But these would be the less significant, the idiosyncratic difference arising out of personality differences rather than from basic issues.

Diversity per se is not a healthy state of affairs. Only as it shows itself on a background of some agreement does it indicate that common elements in our thinking have been arrived at. And I strongly feel that we have been at our work long enough to reach some agreement on theoretical and especially administrative matters. When some methods do not jell after a period of time, I suspect that none have appeal. This is a reflection of our inability to arrive at satisfying solu-

tions to our problems. That, or perhaps we have such methods but few of us are aware of the need to recognize them.

Finally, Woods cautions us that we must question whether our testing is of value and, if need be, give it up. Again, Woods and I agree. Even though many of us received our training in testing, it does not follow that we must forever test. However, the evidence against their use is not so convincing that testing should be foregone; and, until something better comes along, we are foolish to discard it, imperfections and all. My survey took for granted that such evidence does not yet exist. I do not argue that tests *must* remain. *Because* they remain (for the present) we must have a firmer policy regarding their assumptions and how these assumptions are handled administratively.

PAUL HAUCK
East Moline, Illinois

Ethical Dilemma?

In his article "Value Orientations—An Ethical Dilemma" (*Amer. Psychologist*, 1959, 14, 687-693) C. Marshall Lowe, had he empathized more with each orientation (as Fiedler has found the experienced and better therapists—whether of the Adlerian, Freudian, or Rogerian persuasions—do with their clients), might have gained and transmitted a better understanding of these positions and not have found them quite as irreconcilable as he suggests. If one conceives of the self and society as being necessarily dichotomous, then the differences between the orientations of culturalism and humanism as represented by Lowe are perhaps not resolvable. Then one can state, as Lowe does, that "man is a creature caught between the need of individuality and the need of belonging, plagued by contradictory loyalties to the self and to others."

But is the need to belong really and necessarily in conflict with the need for individuality? Indeed, there are excellent theoretical grounds for stating just the opposite: viz., a sense of belonging thoroughly and completely, a sense of being accepted and loved by a family or group, is a necessary condition for the development and expression of creative individuality. We also wonder if "Theism" as defined by Lowe is religion as defined by Allport. Cannot the man who has a deep religious faith also "adjust" to social reality ("Culturalism") while fostering his own growth ("Humanism")? If we look at some of the definitions of positive mental health which are outlined in M. Brewster Smith's article "Research Strategies toward a Conception of Positive Mental Health" (*Amer. Psychologist*, 1959, 14, 673-681), we will find that the criteria of mental health suggested by such a writer as Marie Jahoda embrace such aspects as self-actualization, a

unifying outlook on life, and capacity for adaptation and adjustment.

There is a more basic difference among psychologists as regards their orientations which Lowe has not mentioned: this is their conception of the nature of man. When we make explicit what are the implicit conceptualizations of psychologists with respect to man's nature, we find that we cannot agree with Lowe when he states that "The psychologist as a scientist limits himself to what is," and we must ask whether the scientist can really remain impartial, as Lowe suggests. The experimenter's conception of man affects the hypotheses he proposes, the experiments he undertakes, and his interpretation of these experiments.

Some psychologists tend to project an image of man as a *tabula rasa* which is to be inscribed with certain dicta and values by a series of properly timed and spaced reinforcements. These psychologists have been chiefly concerned with stimulus-response connections and patterns, with resolving whether it is more persuasive to state the pros or cons of an issue first or last and when it is better not to state the cons at all. Their view of man leads naturally to the kind of world Skinner has portrayed in *Walden II*.

Another group sees man as a thinking, judging, valuing, and creative being. These have been concerned with the principles governing cognitive organization and the conditions necessary for productive thinking. Their view is that "The good life is a process of movement in a direction which the human organism selects when it is inwardly free to move in any direction."

These differing conceptions of man's nature lead one school to suggest means of manipulating man's destiny, the other to search for ways of fostering his growth. The one has, and the other seems not to have, faith in man.

DANIEL ADELSON
California Department of
Mental Hygiene

The scholarly and timely article by C. Marshall Lowe . . . raises some interesting issues for the psychotherapist. The "dilemma" is not a *necessary* state of affairs for the psychotherapist, however, especially from the standpoint of rational therapy as described by Ellis (1957a, 1957b, 1958, 1959a, 1959b).

Lowe suggests that the experimentally minded therapist would find "little comfort" in the findings of Rosenthal that clients who *improve* in therapy revise certain values so that they tend to resemble the value system of the therapist. Rosenthal's findings need not

in the least be discomfiting. As a matter of fact, rational therapy postulates that most emotional disturbances arise from and are perpetuated by faulty, self-defeating value systems. In this light a change in the value system is seen as the *major process* by which clients improve. (Incidentally, a value change on the part of the client need not impede experimental evaluation of the effects of the therapist's value system as Lowe suggests, since external criteria could be used to evaluate outcomes of therapies stemming from differing value systems.)

The rational therapist would certainly concur with Williamson's sentiments, as expressed by Lowe, that value orientations should be out in the open and investigated, especially in regard to their therapeutic effectiveness. He would not, however, agree with the fatalism implied in Lowe's suggestion that differences in value orientations cannot be resolved. I am reminded of Bertrand Russell's (1931) chide at Eddington and Jeans: ". . . but all agree that in the last resort science should abdicate before what is called the religious consciousness" (p. 131). This is not to suggest, of course, that anyone, even the psychotherapist, surrenders his *right* to hold any value system simply because it does not fit with available scientific evidence. It seems necessary to mention this since it may be an underlying concern of those who fear to tread scientifically in the area of values.

If Lowe is correct, and I think he is, in assuming that many psychotherapists are suffering from the ethical dilemma so neatly explicated in the article in question, it is likely that these therapists will be obstructed in helping clients over *their* many dilemmas. To such therapists it is suggested that they investigate, with experimental open-mindedness, the pragmatic value of rational psychotherapy.

REFERENCES

- ELLIS, A. Rational psychotherapy and individual psychology. *J. indiv. Psychol.*, 1957, 13, 38-44. (a)
- ELLIS, A. Outcome of employing three techniques of psychotherapy. *J. clin. Psychol.*, 1957, 13, 344-350. (b)
- ELLIS, A. Rational psychotherapy. *J. gen. Psychol.*, 1958, 59, 35-49.
- ELLIS, A. The treatment of a psychopath with rational psychotherapy. *Quad. Criminol. clin.*, 1959, 2, 1-11. (a)
- ELLIS, A. A homosexual treated with rational psychotherapy. *J. clin. Psychol.*, 1959, 15, 338-343. (b)
- RUSSELL, B. The scientific outlook. Glencoe, Illinois: Free Press, 1931.

ROGER J. CALLAHAN
Eastern Michigan University

Psychology in Action

BUSINESS IS TOO IMPORTANT TO BE STUDIED ONLY BY ECONOMISTS

MASON HAIRE

University of California, Berkeley

THE title is a quote whose ultimate source is probably the prolific Anon., but whose more proximal source is in a statement by Thomas H. Carroll, Vice-President of the Ford Foundation, to deans of business schools. I suspect that he included it, as I did, for its value in focusing attention, but it indicates an important development going on in American universities of which psychologists should be aware.

One of the relatively major interests of the Ford Foundation at present is providing assistance in the improvement of business education. Ford has allocated more than \$10,000,000.00 to this end. The focus of this interest may be seen in *Higher Education for Business* (Gordon & Howell, 1959). A companion piece, supported by the Carnegie Foundation, is *The Education of American Businessmen* (Pierson, 1959). For psychologists, apart from their general interest in education, the special interest comes from the emphasis put, both in the books and in the Ford Foundation's program, on the social sciences in general and on psychology in particular.

The approach that flows from this program clearly asks that the business firm be seen, not only as an economic activity, but as an organization of people. In these terms, it would draw heavily on psychology as a discipline, and more widely than the technical professional interest that characterized industrial psychology before, for example, World War II. The board base of theoretical concepts all become applicable as the field opens up new social psychological problems in organization theory, motivational problems in comparative studies of management in different social contexts, and cognitive problems in decision theory and risk taking, in addition to the more traditional problems that flowed from the areas of individual differences, learning, human engineering, attitudes, and the like.

To implement this program, the Ford Foundation has already taken a number of steps indicative of their support of the program which are of general interest to psychologists:

1. A psychologist, a sociologist, and a political scientist were invited to write critical reviews of those areas

of their fields relevant to business with the joint purpose of stimulating research interest in their colleagues and in helping staffs of business schools see the relevance and possibility of experimental and theoretical applications from the social sciences to traditional business areas, such as marketing, organization, administration, and industrial relations. The reviews appeared in the spring of 1959 in the *Psychological Bulletin*, the *American Journal of Sociology*, and the *American Political Science Review*. They were revised for publication by the Columbia University Press as a single monograph (Gordon & Howell, 1959) and in this form will be widely distributed to business school faculties.

2. To help bridge the gap between the fields, three-year visiting professorships have been supported at five business schools: Universities of Indiana, Michigan, North Carolina, Washington, and Wisconsin. These professorships are designed to help the schools explore experimental curricula stressing the contribution to business education and research of all the social sciences (plus mathematics and statistics).

3. Faculty fellowships have been established for business school faculty members to provide for a year's study for those who wish to familiarize themselves with research and concepts in the social sciences. These are aimed at stimulating imaginative research and courses in the joint area, though they are not intended primarily to finance new course development.

4. On the other hand, another group of one-year faculty fellowships has been made available for social scientists who wish to do research on problems related to business and industry. The ultimate purpose of these is to aid in establishing a base of theoretical concepts in the social sciences applying to the business firm.

5. In order to support the work of graduate students, a series of so-called Master Fellowships has been given to senior men in psychology, sociology, and political science. Part of the fellowship support is to facilitate the scholar's own research, but the main bulk of it is designed for application, at his discretion, to the support of graduate students working in areas exemplifying the

contribution of the social sciences to the study of business.

6. Finally, as a means of stimulating improved graduate research, the Ford Foundation will subsidize the publication of a group of outstanding doctoral dissertations each year. They will be selected by an editorial board representing both business schools and the social sciences.

The breadth and diversity of this program will be of interest to psychologists, not only because of its implications for general educational development, but also because one or another of its ramifications is quite apt to have a direct contact with their research and teaching. Still more important, however, are the implications for psychology as a field.

The recognition of psychology as a discipline as one of the bases from which an understanding of business as a social institution must flow makes a distinct change in the essential character of industrial psychology.

The adjective modifying psychology once seemed to mean that there are some problems of industry to which certain techniques developed in psychology offered useful practical solutions. As long as this was the view, the field remained a technical and ancillary one, with the successes of industrial psychology measured on the critical scales of industry rather than those of psychology. The so-called "dollar criterion" of the effectiveness of training has obscured the psychological processes involved, and a similar situation obtained for a long time in studies of attitudes. Likewise in selection, the emphasis on the *usefulness* of tests has left us with a fantastic heritage in the form of a collection of low validity coefficients between a host of paper and pencil tests on the one hand and a bewildering array of jobs on the other. The data are disjointed, piece by piece, and almost impossible to integrate into a meaningful psychological concept. Within this large body of work there is very little attention directed to the psychological problem of ways of working, just as the

psychological process of learning disappeared in the technology of training.

If psychology is to supply a reservoir of concepts and empirical determinations useful for the understanding of business as a social institution, a quite different view is required. Industrial psychology, instead of being psychology applied to industrial problems, must become an attempt to see psychological problems in the special situations provided by the inherent structure of industry. Just as physiological psychology is not the contribution of psychology to the solution of physiological problems, but rather to the joint problems of overlapping disciplines, industrial psychology seems a natural focus of social science concepts on problems framed in a special context.

Fortunately, this seems to be the developing trend within the field. There is now a recognizable subfield that might be called industrial social psychology. Decision theory and the theory of games provide fields both for cognitive theorists and for group dynamicists. Communication studies have left the size of type for properly psychological problems of reinforcement, retention, and the like. Instead of collecting mildly useful validity coefficients of predictor variables, differential psychologists are turning, for example, to the variable weighting of skills as a function of improvement in performance.

These two developments—the emphasis on psychology in business education and the growing closer to psychology of industrial psychology—fit aptly together. If, indeed, it is true that business is too important to be studied only by economists, it is fortunate that psychologists are beginning to focus their full professional beam on it.

REFERENCES

- GORDON, R. A., & HOWELL, J. E. *Higher education for business*. New York: Columbia Univer. Press, 1959.
PIERSON, F. C. *The education of American businessmen*. New York: McGraw-Hill, 1959.

A VISIT TO A RESEARCH HOSPITAL

H. B. MATTY¹

Veterans Administration Hospital, Coral Gables, Florida

AT the request of the Psychology Service, the Manager of the Coral Gables Veterans Administration Hospital recently invited seven junior and senior high school students, and their science teachers, to visit our Psychology Laboratory.

¹Now with the Radio Corporation of America, Camden, New Jersey.

These were youngsters from throughout the county whose exhibits at the latest South Florida Science Fair were closely related to behavioral science.

The first portion of the program was a detailed presentation of the psychological research projects presently being carried out here. This was centered around a demonstration of the apparatuses, which had

a range of complexity from shoeboxes with holes to a programmer for automatic conditioning. The demonstration which excited the most comment was the playback of a tape recording of an EMG, with simultaneous oscillographic and audio display of the muscle activity.

Next came a brief tour through each of the other hospital research laboratories: Histology and Histochemistry, Parasitology and Bacteriology, Biochemistry, Radioisotope, and Virology. A longer time than expected was required to tour the animal rooms, since the writer failed to anticipate the children's interest in such things as newborn rats, whistling responses of guinea pigs to the rattle of cellophane, and softness of rabbits' fur.

Lunch at a downtown restaurant came next. There we were joined by Charles Stenger, Chief, Psychology Service, Coral Gables VA Hospital; Carroll Truss, Assistant Dean of the Graduate School and Assistant Professor of Psychology, University of Miami; Florence Wechsberg, President of the Southeast Florida Psychological Association; a representative of the Mental Health Society of Greater Miami (this organization footed the luncheon bill); and the Head of Science Instruction for all public schools in the county. Truss was the principal speaker. His topic was "Common Misunderstanding about Psychological Research."

During and following lunch there was a great deal of discussion of ways and means of stimulating interest and activity in psychological science in the public schools. There were plans drawn up for arranging permanent channels of communication between local psychologists and the public schools.

The entire program was specifically pitched toward personal contacts. Prior to the invitation, each of the students received a letter complimenting his (or her) Science Fair exhibit, commending his efforts, and encouraging him to continue his work. At the same time, the Manager's letter of invitation stressed recognition of the valuable contributions of the science teachers. During the hospital visit, the youngsters were encouraged to talk about their own research interests. Everything at the hospital was done quite informally; the same was true at lunch. There was no head table,

and the psychologists seated themselves so that they were well distributed among students and teachers, in order to maximize personal conversation.

There have been several outcomes of the program: (a) The Head of Science Instruction has requested assistance from local psychologists in presenting both teachers and students with better understanding of psychological science. (b) The Southeast Florida Psychological Association has created a permanent committee for liaison with the public schools and the Science Fair. (c) A psychologist has been invited to speak to an honors class in biology at a local high school. (d) The SEFPA has agreed to provide prizes for the best psychology exhibit, at each grade level, at future Science Fairs. (e) The Mental Health Society of Greater Miami has invited all pertinent psychology exhibits at future Science Fairs to be displayed again at the annual Mental Health Fair. (f) The Mental Health Society is also undertaking to send the exhibitor of the one best psychology exhibit to the State Science Fair. (g) The hospital has received several requests to provide more "guided tours" of the Research Department. (h) Officials of the South Florida Science Fair have been asked to establish Psychology as a separate category in the future (in the past, psychology exhibits were included in physiology); and they have indicated a willingness to do so, if the number of psychology exhibits increases sufficiently.

Despite plenty of notice and several phone calls, we were unable to obtain newspaper coverage. A written report of the program was forwarded to the local newspapers, but this was not used either. Nevertheless, there was agreement that the program was a success. In addition to increasing general interest in psychology, everyone seemed to have a good time (lunch was really delicious, too). We intend to do the same thing again next year. Our feeling is that, if the public is to become more aware, and better informed, of its stake in psychological research, then psychologists must be the ones to exercise effective leadership in bringing this about. If we wait to be asked, this will never happen. We need to stimulate activity and reinforce the desired responses judiciously.

Psychology in the News

Great Minds Same Channel Department . . .

From time to time some scientist discusses the need for better mobilization of the technological information, the imagination, and the psychological insight which America might apply to problems of arms control. In May 1958, for example, Roger W. Russell wrote in this blue-backed journal about the general idea of a "Manhattan Project of Peace."

On March 8, 1960, in a Senate colloquy on disarmament, Hubert H. Humphrey (D., Minn.) said:

No agency of the Government has been given the responsibility or the funds to do an adequate job of studying the control problem. Today at least six government agencies are involved in and concerned with the technical problems connected with the controlled cessation of nuclear weapons tests. There is no one agency or person to coordinate this research or to see that decisions are made. This situation is indefensible.

There must be American leadership, American drive, American ingenuity to make a breakthrough that would end the arms race and secure the safety of our nation at the same time. There must be a way out.

The truth is that we have never seriously, massively, intensively tried to put our scientific and technological capability to work to create the technical basis for a world security system.

We have never undertaken a Manhattan Project for peace.

Today, if we are willing to invest the necessary funds, to harness the greatest minds in science throughout the world, we surely can devise a system of inspection and enforcement techniques and procedures and organizations that would provide every possible guarantee against double-dealing and secret preparations for any great war.

The Senator said further that the proposal for a peace agency, made by the Science and Technology Committee of the Democratic Advisory Council, which Humphrey has sponsored in the form of a bill in the Congress, would pave the way for a real drive in this direction. He said on the Senate floor (in an intermission from the civil rights filibuster) that:

With continuous study we may reasonably hope to find better and more politically feasible proposals, based not merely upon ideals, but upon what can and must be done to survive in the hazardous hydrogen age. We cannot continue to stumble along seeking to create solutions based on the technical facts of yesterday. Politics and science

must work in harmony. Science and technology represent a new dimension and force in foreign policy.

The National Peace Agency which would be established through passage of S.2989, a bill which I introduced on February 4, has as its central purpose the fixing of central responsibility within our nation to work out constructive and effective arms control measures. It provides the framework within which a genuine Manhattan-type project for peace could be initiated. And then the accomplishments of our Manhattan project must be merged with those of other nations to devise a scientifically workable and politically acceptable work security system.

For the benefit of Republican readers, it might be said that we checked with the Senator's office to see where he had picked up the phrase "Manhattan Project for Peace" and learned it was *not* from any APA source. It might also be noted that the Republican administration has already mixed technical information and political imagination in several projects, such as the atoms-for-peace proposal, the "open skies" concept, and assorted known and unknown proposals coming from such places as the Gaither study report (still unpublished).

* * *

"Murder is a Bad Thing" . . .

The book *Pornography and the Law* by Eberhard and Phyllis Kronhausen, psychologists and analysts of La Jolla, California, is receiving a lot of attention in a wide range of publications. Their book undertakes to distinguish between "erotic realism in literature" and pornography with a more direct purpose, and they give their readers example after example of what they would call pornography or "hard core obscenity." Perhaps most people would agree with them, so their work becomes a most unusual anthology.

In addition to the hard-cover edition, there is a 75¢ paperback available; and that brings the Kronhausen book into drugstore book racks, where it may appear quite close to other books dealing in a less scholarly way with erotic realism and romanticism.

The wide and open sale of the book has something to do with the scathing attack on it from the national Catholic Weekly *America* which starts off by characterizing it as "one of the most muddle-

headed justifications of pornography" The editorialist for *America* (January 9, 1960) says:

all the long passages quoted by the Kronhausens are without doubt not merely erotically realistic, they are flatly pornographic, and their cumulative effect is simply to nudge the unhealthy interest of the impressionable reader. As one review of the book has stated: "It offers a compendium of erotic passages which goes far beyond anything offered in the drugstore book racks of America." What sane social purpose is served, we ask the authors and the publisher, by such a parade of pornography cynically passed in review presumably to help cure a social evil? It's as though one were to say "murder is a bad thing, and to show you how bad it is, I shall commit 25 murders; see what I mean?"

But the attacker does not find this the worst part of the book. Further he says:

But the really insidious snare in the Kronhausen argument is the chapter on the law's approach to the problem of pornography. It all sounds very learned, but it is naively unscientific. The authors adopt the June, 1957 definition of the U. S. Supreme Court that obscenity must be determined by the test "whether to the average person, applying contemporary community standards, the dominant theme of the material taken as a whole appeals to prurient interest." The reason the authors underscore the word "average" is that they turn to the sensational Kinsey reports (two books, *Sexual Behavior in the Male*, *Sexual Behavior in the Human Female*) to determine how the average person thinks and acts about sex.

This is a feeble prop, indeed. Immediately after the publication of the Kinsey findings, reputable psychiatrists and sociologists by the dozens attacked Kinsey's statistical methods and his conclusions. It is simply *not* scientifically proved that Kinsey's sampling of some 5,000 people in each survey determines "contemporary community standards."

In parting, however, the Jesuit editorialist gave a sort of *pax vobiscum*: "The Kronhausens undoubtedly meant well."

Stevenson not "Not Electable"
Social Science Is Ineluctable . . .

Students of human behavior would predict that a study of "The American Voter" would be of keen interest in 1960, but perhaps subject to partisan or confused interpretation. That prediction would have been correct in the case herewith reported.

The study, as embodied in a book of that name from the University of Michigan, was scheduled for publication by John Wiley in April, but caused quite a stir this January. Angus Campbell, Director of the Survey Research Center at the university, and Philip E. Converse, Warren E. Miller, and Donald E. Stokes, co-authors, were informed that the findings of their study were sure to be of press interest; so they cooperated in the advance attention to their book. Their university information office published a release about the book, highlighting conclusions like these:

Personal attributes played a far greater part than policy statements in developing a public "image" of the candidates in the last two Presidential elections, University of Michigan research indicates.

Despite Stevenson's concentration on foreign issues, the public was largely unaware of his positions in either 1952 or 1956. And even after four years in the White House, Eisenhower was connected with domestic issues to only a slight degree by the public.

Earl Mazo, Washington correspondent and the biographer of Richard M. Nixon, wrote a story, published in the *Washington Post* and elsewhere, which said that the study indicated Stevenson was "not electable." So the authors felt obliged to write the *Post*, which quickly printed their letter, explaining that this phrase and concept belonged to Mazo. The authors also took exception to Mazo's line stating that "top-layer Democrats" were studying the study. Campbell and his colleagues "would like to make clear that the same manuscript was made available to top-layer Republican leaders at the same time as it was received by the Democrats."

Mazo is the man whose written discussion of recent California history, notably that concerning Nixon, aroused the ire of none other than Chief Justice Earl Warren, a fellow Californian with strong views on Nixon history. If anything further comes of the Mazo-Campbell correspondence, sound strategy would indicate they should by all means carry it to the Supreme Court.

—MICHAEL AMRINE

Psychology in the States

The Schematic Sowbug and the Profession

When Tolman introduced his picturesque schema in explanation of the process by which discriminations get made and learned, he was doubtlessly little inclined to apply it to the development of the profession. If it be not heresy, we suggest the model is a convenient one. Without too many alterations his sowbug might well represent psychology itself as it veers, in its own tropistic fashion, between the blacks, whites, and grays of the courses of development open to it.

Surely, there is room for more than a little VTE-ing. Not too long ago there was heard the insistent cry that the professional concerns of psychology be attended to (under faint threat of the need to establish a separate body for the purpose). Not much later, as we recall, appeared the results of a survey by one thoroughly scientific APA division which had decided "to study the attitudes of its members toward APA."

How much such stimulus sources leave our psychological sowbug oscillating as it seeks for some sort of comfortable equilibrium is not quite clear. But at least two committees have respect for the vectors, fields of force, tensions, and orientation needs at work in psychology's life space and are approaching their tasks with a resolve to study the problems systematically. Here is how they are proceeding.

Committee on Scientific and Professional Responsibility. Under the chairmanship of James G. Miller, this committee of the Board of Professional Affairs has announced in earlier pages of this journal how it was setting out to study the kinds of social influences and controls which affect the scientific and professional behavior of psychologists. It discerned 28 such at first; and, by dint of an intuitive factor analysis of sorts, came up with three major clusters: interpersonal influences, group membership influences, and formal social regulatory influences.

How to study these? Committees are not ideally equipped to carry out major projects requiring both money and man-hours. But this particular committee, it turns out, has already managed to commission a 59-page manuscript produced by a subcommittee under the chairmanship of Harold

H. Kelley. The work represents a survey of the experimental literature in social psychology having implications for the formal and informal social influences acting upon the psychologist in his scientific and professional activities. Focusing on the literature dealing with influence in small groups, the paper considers in turn such issues as: the effects of primary groups; how groups acquire and hold their values; how groups affect the behavior, perceptions, and values of the individual; psychoanalytic hypotheses pertaining to internalization of group norms; problems created by pressures toward conformity.

A second subcommittee, under the chairmanship of Raymond A. Bauer, turns its attention toward a survey of another sort. Focusing on the sociology of professions, it proposes taking off from the base provided by the recently published *America's Psychologists*. With hope for help from the proverbial financial angel, this subcommittee has proposed two projects: (a) a sample survey of the attitudes of both the general and specialized publics (e.g., the business community) toward the use of psychological services; (b) a survey of psychological functions in the community as carried out by both psychologists and nonpsychologists. Its hope: "to trace a set of 'professional' functions throughout the fabric of a community."

Still a third subcommittee is already in process of taking a look at how others do it and what they can teach us. Medicine and social work have faced similar problems; so have law and religion; engineering, industry, and labor, too. In each case the committee has sought the help of psychologists wise in the ways of these other professions, asking that they provide accounts of how the latter manage their professional lives, shape their values, influence their members and in turn are influenced. The results should provide a meaningful ground against which the figure of our own profession may be more clearly viewed.

Now, if the above has not left our introduction behind, we would want to take our sowbug out from under the rock where it has crawled by this time, in order to point it in the direction of yet another committee concerned with discriminations and decisions and values.

Committee on Scientific and Professional Ethics and Conduct. If there is one APA committee which is responsibly aware that its deliberations touch closely on the lives of those brought before it, it is CSPEC. Were it called upon to confront only ethical violations of an egregious kind, this committee might feel comfortable drawing the line between the licit and the illicit. This is hardly the case, however. The moral issues are not all that clear-cut, nor the situations always of the life-and-death variety. The discrimination is sometimes between the white of right and the black of wrong, as often between white and the gray of irresponsibility, or even between white and the light gray of unorthodoxy. Nor is it always easy to decide whether a given case falls in the domain of ethics or the areas of bad taste, poor judgment, or just simple naivete.

The problem is none simpler when there turn out to be not only APA's sowbug but 52 others as well—the state association ethics committees—each rectitropic (if this is the word for justice-seeking) after its own fashion. What is more, the types of questions are several: philosophic (as between relative and absolute values), scientific (in terms of the reliability and validity of ethical judgments), and practical (with regard to synchronizing decisions and actions at the state and national levels).

Apropos of the latter, CSPEC has already asked itself some questions about which state associations may well be thinking. Of what sort and how explicit is the information which APA may with legal impunity and clear conscience exchange with state association ethics committees? Can and should levels of information be established, some to be shared at the request of appropriate bodies, others to be more highly classified? What kind of reciprocity have both parties a right to expect? In view of the range of individual differences among state associations, is it possible at this stage to lay down uniform ground rules governing cooperation in ethics cases?

If last year's survey of state association ethics committees is any indication, the associations hardly feel comfortable in holding the scales of justice at this point. There are some to whom no news, in the form of violations of ethics, is good news; others who would prefer to take a Pontius Pilate stance; still others (although few) who have already outlined a philosophy of ethics, adopted policy, and established procedures. And all the

while, for everyone, there are the mixed feelings about having someone judged by his immediate peers because they know him best, and yet not judged by them because they are too personally involved.

These were some of the thoughts which crowded in recently as we came across Tolman's early paper in our files. The sowbug, we mused, has it no harder than psychology. Confronted with problem situations, both resolve them in their own ways: the bug somewhat matter-of-factly, psychology with some emotion but, we console ourselves, also with some calculated decision making and especially with some feeling of conscience.

* * *

Who Tests the Testers? This is the question a magazine writer asked some time ago, taking few pains to disguise his righteous indignation. It is the same theme on which a recent conference on state examination procedures played a few variations—without either righteousness or indignation but with some appreciation of the problems of examination.

How can psychologists effectively go about the task of testing their colleagues? This was the question raised by 16 psychologists representing boards of examiners, both statutory and nonstatutory, from as many states. Having apparently heard tell that barbers usually need haircuts and ministers' sons supposedly land in jail, they were loathe to let it be said that experts in the business of evaluation were not above doing some pretty perfunctory testing.

In the initial attempt at visualizing a "common core," some agreements were reached with respect to the character of the examination. Its level, it was felt, should be set somewhere between doctoral preliminaries and the ABEPP examination. While specialty-oriented questions have a place, its general focus should be on basic psychology, leaving to the respective boards of examiners the responsibility for satisfying themselves as to candidates' professional and ethical qualifications.

Such and other decisions were tentative. An interim committee under the chairmanship of Joseph R. Sanders will canvass state boards of examiners with respect to the technical problems as well as such more earthy ones as financing, the findings to form the basis of a workshop during the APA convention.

Projective Technique, Letterhead Style. We feel rather like the printer who, prospective bride and groom before him, exhibits the several styles of wedding announcements from which they may choose. The printer, we suspect, has been through this all too often. We have not, as we look at the array of letterheads which emblazon the stationery of state associations.

We say emblazon, but some apparently like it hot and some like it cold—or whatever the analog of the nursery rhyme is in this context. The range is from an unpretentious, almost austere, "X Psychological Association" to something approximating the letterheads of associations whose cornucopia of trustees spills over most of the page.

Most often the style falls somewhere in between, the association's name being accompanied by its major officers, sometimes by a mailing address. The latter, in the more penurious associations, gets inked out as offices change hands, the officers suffering the same fate as they change seats. The less sentimental, accustomed to seeing heads roll in elections, print but the ongoing office, ominously leaving room for insertion of the name of the present incumbent.

There is little pretense in the lot. But there are a few added touches. The psychologist's *psi* sometimes shows up, affiliation with APA is several times noted, the date of founding appears here and there, and in one case there is an unpretentious citation of the association's purpose. All in all, it would seem, this is the kind of unscented, untinted, and untainted stationery one would associate with psychologists.

* * *

If Thou Wouldst Prove Thy Mettle, Show It. This aphoristic injunction does not appear in the Bible, Shakespeare, or Bartlett's *Familiar Quotations*. But if it did, it could, properly Latinized, serve as the motto of the New York State Psychological Association as it moves on a large scale into the business of exhibits at its Annual Meeting.

With two handsomely printed brochures, NYSPA is inviting firms, both large and small, to exhibit at its meeting of May 6-7. The smaller of the booklets invites participation in a "Combined Book Exhibit," the larger offers the opportunity to rent space for exhibits of any appropriate kind. Both suggest that the 700 psychologists expected to

attend constitute a population of textbook users, apparatus tenders, and consumers of psychological and educational materials generally.

APA might well look to its laurels here. The NYSPA prospectus overlooks little. Spilling over onto the ballroom floor from the hotel mezzanine, the exhibit area numbers 62 booths, offering a la carte the kinds of facilities which should suit any exhibitor's needs and pocketbook. Booth prices range from \$50.00 to \$100.00, the criteria apparently being size and location. A formal application blank sets the terms of the agreement.

The New Yorkers leave little to the imagination. Two pages' worth of "Exhibit Information" deal with such reality-bound details as space confirmation and cancellation, exhibit equipment provided and not provided, maximum loads which floors may carry per square foot, and the nature of the fire laws. The conditions of the agreement are liberal but unequivocal. NYSPA retains certain prerogatives, places conditions on the approval of exhibits and constraints upon the subletting of space. Finally, it names the terms of payment.

What else is there to say?

Moment of Truth. The vagaries of television yield neither to congressional investigating committees nor to the inexorable demands of science. Psychologists prepared to take to the air waves had better realize this. The South Carolina Psychological Association already has, unless the following description of an incident in its recent television series has been reported to us tongue in cheek:

Dr. Guido Borasio's excellent demonstration of experimental psychology included a well-conditioned albino in a Skinner box. Dr. Borasio certainly learned about the difficulties of staging such a live demonstration when, while waiting for the previous show to end, the power on his apparatus had to be turned off, since the rat's bar pressing was being picked up in the middle of *The Living Word*. The poor albino began his extinction trial before he made his TV debut.

Well, even veteran performers like Jack Paar have not yet figured all the angles, we guess.

—M. CURTIS LANGHORNE
Chairman
 Board of Professional Affairs
 ERASMUS L. HOCH
Administrative Officer
 State and Professional Affairs

Notes and News

Ramona Wallace, of San Rafael, California, died in 1960.

T. Henry Scott, of Auckland, New Zealand, died on February 1, 1960.

Jan Eindhoven, formerly in the Quartermaster Food and Container Institute, has been appointed a Project Director in the Interview Research Institute of the Market Research Corporation of America.

Henry E. Garrett, of the University of Virginia, has been appointed Associate Editor in America of the new Indian journal *The Mankind Quarterly* dealing with topics in anthropology, psychology, and genetics.

Walter V. Clarke Associates, Inc. announces the addition to its staff of Charles H. Griffin as Account Associate in the East Providence (Rhode Island) office of the firm.

Samuel P. Hayes, Jr. has been appointed Chief of the Social Science Department of the UNESCO Secretariat in Paris.

Mauricio Knobel has been elected President of the Argentine Society of Psychosomatic Medicine.

John V. Liccione, formerly at Marquette University, has become Chief Psychologist at the Hospital for Mental Diseases, Milwaukee, Wisconsin.

J. Kenneth Little, of the United States Department of Health, Education, and Welfare, has been appointed to the newly created position of Director, Survey of Federal Programs in Higher Education.

John J. McMillan, formerly with Rohrer, Hibler & Replogle, has been appointed Chief Psychologist and Associate Professor of Psychiatry (Psychology) at the Medical College of Virginia in Richmond.

As a tribute to the scholarly and administrative achievements of Donald G. Marquis, a group of his former colleagues in the Department of Psychology at the University of Michigan have created the Donald G. Marquis Dissertation Prize.

This prize is to be awarded annually to the student judged to have submitted the best doctoral dissertation in psychology or in one of the interdepartmental doctoral programs which include psychology. Marquis, now at the Massachusetts Institute of Technology, served as Chairman of the Department of Psychology at the University of Michigan from 1945 to 1958.

P. B. Carpenter and Paul R. Fuller have joined the Psychology and Human Engineering Unit in the Space Medicine Section of the Martin Company, Denver, Colorado. The unit is headed by John B. Fink.

Richard C. Miller and Robert L. Romano are Co-Directors of the recently formed Pittsburgh Psychological Counseling Center.

The Greater Kansas City Psychological Association invites further participation in its endeavor to establish the Lorenz Misbach Memorial Library Fund. The committee in charge has set June 1960 as the date of termination of its drive. Contributions may be sent to: Betty Eyles; Rehabilitation Institute; 3600 Troost; Kansas City, Missouri; or to: Bernard Kleinman; University of Kansas City; 5100 Rockhill Road; Kansas City, Missouri.

Charles C. Perkins, presently at Kent State University, will become Chairman of the Psychology Department at Emory University, effective with the beginning of the fall quarter of 1960.

Klaus F. Riegel, of the University of Michigan, received a special award from the Deutsche Forschungsgemeinschaft [National German Science Foundation] for his paper on "The Scientific and Methodological Basis of Psychological Tests."

Herbert Charles Schulberg has been appointed Clinical Psychologist at Fairfield State Hospital in Newtown, Connecticut.

George K. Shoemaker recently joined the staff of Ralph W. Ogan Associates, Inc. in Kansas City, Missouri. He was formerly associated with the General Motors Corporation.

H. Wallace Sinaiko is currently on leave of absence from the University of Illinois to work on an Office of Naval Research project in Honolulu, Hawaii.

Victor H. Vroom, of the University of Michigan, was one of the winners of a Business Administration and Social Sciences Doctoral Dissertation Competition sponsored by the Ford Foundation. The competition was open to students completing dissertations on topics related to the practice of business or management.

Samuel A. Weiss, of the New York University Postgraduate Medical School, has also been appointed Psychological Consultant to Stern College for Women at Yeshiva University.

The **Kenneth Craik Research Award** is for the assistance of persons engaged in postgraduate research, preferably in physiological psychology. The award is administered by the College Council of St. John's College, University of Cambridge, England. Persons of either sex and of any academic standing are eligible. The person to whom the award is made need not be and shall not be required to become a member of the college and need not reside in the university. The value of the award is £450 a year. Applications should be sent to The Master (St. John's College; Cambridge, England) so as to reach him not later than April 1960, accompanied by full particulars of the applicant, a statement of the nature and probable duration of the postgraduate research contemplated and of the place where it is intended to pursue it, particulars of any further financial assistance the applicant expects to receive, and the names and addresses of not more than three persons to whom the council, if it wishes, may refer.

The **Psychiatric and Psychosomatic Research Institute** of Mount Sinai Hospital, Los Angeles, is now accepting applications for a postdoctoral fellowship, to start July 1, 1960. The stipend for one year is \$6000.00. The Training Program focuses on research in psychoanalytic psychotherapy and also provides opportunity for supervised experience in psychodiagnostics and psychotherapy. Candidates must have completed a PhD with major work in clinical psychology and at least one year of supervised clinical experience.

Some form of personal therapy is desirable. Address applications to: Hedda Bolgar, Chief Psychologist; PPRI, Mount Sinai Hospital; 8720 Beverly Boulevard; Los Angeles 48, California.

A **Center for Research in Social Psychology** has been established in the Department of Psychology at the University of Illinois. The center is an organization of laboratories and research projects concerned with problems in social and industrial psychology and personality theory.

The Committee on Special Classifications of the Special Libraries Association and the Classification Committee of the Cataloging and Classification Section, Resources and Technical Services Division, American Library Association, are cooperating in a continuing project to develop and expand a Loan Collection of **library classification schemes**. It is imperative that the collection be kept up-to-date through the addition of new schemes or with modernized versions of existing classification schedules. *Those who have developed special classification schemes for specific types of material or for special subjects are invited to contribute a copy of their work to the collection.* Classification schemes should be sent to: Jesse H. Shera, Curator, SLA Loan Collection; School of Library Science, Western Reserve University; Cleveland 6, Ohio.

An international preparatory study group on **mental health and the education of parents** is being formed under the auspices of the World Federation for Mental Health. The primary objective will be to prepare, mainly by correspondence, material which can be presented to a special working group on this subject at the International Congress on Mental Health in Paris, August 1961. James L. MacKay is acting as consultant to this project. *Those interested in joining the study group should write to:* Monsieur Isambert; 4 Rue Brunel; Paris 17, France.

The theme of the third **Annual Nassau County Institute for Mental Health in the Schools**, held at Hofstra College on March 30, 1960, was "Inseparability of Mental Health and the Three R's." Rachel Malamud was a Co-Chairman of the institute.

The topic of the second **Behavioral Science Symposium** at the University of Virginia on April 4-5, 1960 was "The Lawful Nature of Behavior." For further information, write to: Katherine Tif-

fany, Secretary; Division of Behavioral Science, University of Virginia School of Medicine; Charlottesville, Virginia.

A conference on "Fundamentals of Psychology: The Psychology of Thinking" will be held under the auspices of the New York Academy of Sciences in New York City on April 28-29, 1960. Requests to attend the conference should be addressed to: Executive Director, New York Academy of Sciences; 2 East 63 Street; New York 21, New York.

The **Walter Van Dyke Bingham Lecture** will be given by Dael Wolfe, Executive Officer of the American Association for the Advancement of Science, at Columbia University on May 10, 1960. The topic will be "Diversity of Talent."

The thirteenth **Annual Conference on Aging** will be held at the University of Michigan on June 27-29, 1960. Requests for information and membership in the conference should be addressed to: Wilma Donahue, Chairman; Division of Gerontology, University of Michigan; Ann Arbor, Michigan.

The 1960 **Annual Workshop in Projective Drawings** will be conducted at the New York State Psychiatric Institute in New York City on July 25-28. For information on admission or requirements, write to: Selma Landisberg; 166 East 35 Street; New York 16, New York.

The Annual Meeting of the **American Society of Clinical Hypnosis** will be held on August 7-10, 1960 in Miami Beach, Florida. For further information, write to: Seymour Hershman, Secretary; 6770 North Lincoln Avenue; Chicago 46, Illinois.

The **International Association for Psychosomatic Cancer Research** is forming and holding its first meeting in Amsterdam on August 11-13, 1960. All those interested in this area are invited to communicate with: Lawrence LeShan; 144 East 90 Street; New York 28, New York.

Ivo Kohler, Director of the Institute of Experimental Psychology at the University of Innsbruck is spending the spring semester as Visiting Professor at Duke University where he is conducting a seminar on Selected Problems of Perception and Learning.

The observations made by Kimber in his recent comment (November 1959, pp. 699-700) follow

closely the formation of a New York City group of **psychologists in marriage counseling**. This group is in the process of incorporating, presenting symposia, and cooperating with other psychologists in different parts of the country. Stanley Rosner (1081 Iranistan Avenue; Bridgeport 4, Connecticut) is Membership Chairman.

A new scientific society, the **Psychonomic Society**,¹ was organized in Chicago on December 31, 1959. The undersigned have served as the Organizing Committee of the new society. The step was taken after years of informal discussions and several months of planning.

We are convinced that there is a need for such a society and that it will serve the interests of all psychologists. We wish to describe it briefly in order that its scope and purposes will be generally understood.

The new society is not in any sense a "secession" from the APA. Members of the Organizing Committee declare their intent to continue membership in the APA. Rather we regard the new society as one that complements the APA by increasing communication among those of its members whose primary interest is in research and scholarship. We believe that it will meet needs of vital importance to the growth of psychology as a science that no longer can be met within the framework of the APA Annual Meeting.

A most acute need, recently made the major theme of the APA's Board of Scientific Affairs (*Amer. Psychologist*, 1959, 14, 267-271), is for more rapid communication, both formal and informal, among those doing research and those interested in it. The APA Annual Meeting makes a reasonable compromise between professional and scientific interests, but in so doing it has become so large and has placed so many restrictions on the scientific aspects of its program that it hampers and dilutes communication among its active scientists and scholars. We feel that the new society

¹ A note on the name of the society: A distinctive, brief, easily identifiable name, free of connotation, and not requiring qualifiers, such as "research," "scientific," or "experimental" was sought. A number of alternatives were ruled out in preferential balloting before the final choice was made.

The word "psychonomy" is not coined; it may be found in unabridged dictionaries. It is essentially synonymous with "psychology," and it is our hope and expectation that it will come to connote what the society has been founded to foster: scientific psychological research.

can contribute to scientific communication by holding meetings of moderate size, often in university surroundings, attended primarily by individuals who can contribute to the science of behavior.

We have considered carefully other ways of achieving these objectives within the framework of the APA and of other existing organizations. Regional meetings suffer from being regional and, in the east and midwest, from being too large. Some other, more "select" organizations are much too small. All serve their purposes and should be supported. But we believe there should be one national organization large enough to include all persons qualified to contribute to the science of behavior, but small enough to serve their interests well.

Realizing that the members of Division 3 (Experimental Psychology) of the APA constitute an important fraction of the potential members of the new society, we have considered the possibility of separate meetings. Aside from the fact that Division 3 has not voted to do this, such a move would tend to fragment the APA, and this is not our purpose. We believe Division 3 should "stay in" the APA.

With this as our purpose, the Organizing Committee has compiled a list of approximately 800 individuals who clearly qualify for membership in the new organization and to whom invitations to

join as Charter Members have been issued. We have undoubtedly missed many qualified persons; but they will surely be brought to our attention, and further invitations will be issued. After the Charter Membership is constituted, additional persons qualified as research workers will become eligible for election.

The first Annual Meeting of the new society has been called for September 1-3, 1960 at the University of Chicago. The dates of subsequent meetings, as well as any changes in the Bylaws, will be determined by the membership.

C. T. Morgan, of the University of Wisconsin, was elected Chairman of the Governing Board; and W. S. Verplanck, of the University of Maryland, the Secretary-Treasurer. Requests for additional information may be addressed to either of them, as well as to any member of the Organizing Committee listed below.

W. J. BROGDEN
W. K. ESTES
F. A. GELDARD
C. H. GRAHAM
L. G. HUMPHREYS
C. T. MORGAN
W. D. NEFF
K. W. SPENCE
S. S. STEVENS
B. J. UNDERWOOD.

Convention Calendar

American Psychological Association: September 1-7, 1960; Chicago, Illinois

For information, write to:

Janice P. Fish
American Psychological Association
1333 Sixteenth Street, N.W.
Washington 6, D. C.

Southern Society for Philosophy and Psychology:
April 14-16, 1960; Biloxi, Mississippi

For information, write to:

Dan R. Kenshalo
Florida State University
Tallahassee, Florida

Eastern Psychological Association: April 15-16, 1960;
New York, New York

For information, write to:

Carl H. Rush
P. O. Box 252
Glenbrook, Connecticut

Western Psychological Association: April 21-23, 1960;
San Jose, California

For information, write to:

Brant Clark
Department of Psychology
San Jose State College
San Jose 14, California

Midwestern Psychological Association: April 28-30, 1960; St. Louis, Missouri

For information, write to:

I. E. Farber, Secretary-Treasurer
Midwestern Psychological Association
Department of Psychology
State University of Iowa
Iowa City, Iowa

Rocky Mountain Psychological Association: May 5-7, 1960; Glenwood Springs, Colorado

For information, write to:

William H. Brown
Department of Psychiatry
University of Utah College of Medicine
156 Westminster Avenue
Salt Lake City 15, Utah

Inter-Society Color Council: April 11-12, 1960; Philadelphia, Pennsylvania

For information, write to:

Ralph M. Evans, Secretary
Inter-Society Color Council
Color Technology Division, Building 65
Eastman Kodak Company
Rochester 4, New York

GENERAL ARRANGEMENTS

SIXTY-EIGHTH ANNUAL CONVENTION OF THE AMERICAN PSYCHOLOGICAL ASSOCIATION

Chicago, Illinois, September 1-7, 1960

GEORGE S. SPEER, *Convention Manager*

PHILIP ASH, *Associate Convention Manager*

IN the January *American Psychologist*, the APA Convention Program Committee published the "Call for Papers and Symposia" which covers regulations and procedures on the presentation of symposia and papers, and other program arrangements.

This "General Arrangements" is concerned with the details of local facilities and arrangements, convention planning, and regulations governing participation in our Annual Convention in all ways which are not specifically concerned with symposia, papers, and other programs. However, the call also includes pertinent material for those who have any responsibility for arrangements. Because so many of these details overlap, conflict, impinge, or in other ways are interrelated, all are urged to become familiar with both the "Call for Papers and Symposia" and the "General Arrangements."

This year the local arrangements are handled by a Convention Manager, an Associate Convention Manager, and a number of committee chairmen who have planned and are responsible for the various details of the convention. Members interested in matters handled by the various committees are requested to communicate directly with the appropriate chairmen. Those who are interested in other matters, not covered directly by the committees, should write to: George S. Speer, APA Convention Manager; Illinois Institute of Technology; 3329 South Federal Street; Chicago 16, Illinois; or to: Philip Ash, Associate Convention Manager; Inland Steel Company; 30 West Monroe Street; Chicago 3, Illinois.

Time and Place of Meeting. The sixty-eighth Annual Convention will meet in the Morrison and Sherman Hotels from Thursday, September 1, through Wednesday, September 7, 1960. The two Convention Headquarters Hotels are only two blocks apart.

Chicago's convenient location, excellent transportation, and many attractions have continued to keep the city in the forefront as a convention locale. Chicago has more conventions than any other city in our nation. Our Headquarters Hotels are located in an area which is convenient to the city's many cosmopolitan restaurants, theaters, hotels, and world famous stores. Night life and other entertainment is not far from either of the hotels. Both the Morrison and the Sherman have unique and attractive restaurants. The Well of the Sea and the Porterhouse at the Sherman, and

the new Carousel and the Boston Oyster House at the Morrison are attractive and popular eating and entertainment spots. In addition, there are many restaurants with excellent menus, and a wide range of prices, within a few minutes' walk or cab ride. Shops on State Street and Michigan Avenue, the Museum of Natural History, Merchandise Mart, the Art Institute, and the Chicago Board of Trade are other attractions which will appeal to the visitor to Chicago.

Registration Procedures. This year the Advanced Registration Form includes hotel information and the hotel reservation blank. This form appears at the end of this announcement. Those planning to attend the convention should complete this form and mail it to: APA Housing Bureau; Room 900; 134 North LaSalle Street; Chicago 2, Illinois.

There are always a number of reasons why the registration and reservation form should be returned as early as possible. This year it is particularly important to do so. Both hotels have set aside a number of sleeping rooms for our members. The rates for these allotted rooms are guaranteed at the rate you request on the Advanced Registration Form, **if the form has been returned before August 1.** After August 1 the guaranteed rate no longer applies, although the hotels will attempt to provide rooms as close to the rate specified as possible. Consequently, it is to your advantage to return your registration form as early as possible, so that your room can be assigned and confirmation guaranteed at the rate you request.

Attention is called to the dormitory-style rooms available in both hotels. We are sure that graduate students and younger participants will be especially pleased with the type of accommodation which is provided. Those who wish these accommodations should be warned, however, that the rates per person apply only when there are four or more individuals in a room. If you are planning to occupy a dormitory-style room, make prior arrangements with each other with the understanding that you will share the cost of the room and will occupy the room for the same period of time.

Advanced registration for the convention itself is also of considerable advantage, as it means that you can be registered at the time of the convention with a minimum delay. The registration badges are prepared

in advance for those who have registered in advance. You need only call at the Registration Desk, indicate your local address, and pick up your badge. There is no delay, no writing, and no problem. Registration Desks will be provided in both the Morrison and the Sherman. It is hoped that the majority of those persons who plan to attend the convention will register in advance because of this added convenience and, thus, help to keep our Convention Directory complete and accurate.

The Registration Desks will be open from 2:00 P.M. to 8:00 P.M. on Wednesday, August 31; from 10:00 A.M. to 5:00 P.M. on Sunday, September 4; from 8:00 A.M. to noon on Wednesday, September 7; and from 8:00 A.M. to 5:00 P.M. on all other days. Registration activities will be directed by Winfred Hill (Psychology Department, Northwestern University; Evanston, Illinois).

Directory of Convention Registrants. A directory of registered members, guests, volunteer workers, and exhibitors will be maintained near the Registration Desks in each hotel: on the mezzanine floor of the Sherman and on the first floor of the Morrison. Bulletin boards will be located nearby in both hotels. A Mail and Message Center will be located in the Sherman near the Registration Desk. Thomas M. Kennedy (Student Psychological Services, Loyola University; Chicago 26, Illinois) will be in charge of the Directory and of the Mail and Message Centers.

Information Desks. Information Desks will be maintained in both hotels. These desks will have the latest information about all convention events; room locations of all scheduled events; and information about restaurants, local points of interest, and recreational facilities. Keith R. Jewel (George Fry and Associates; 135 South LaSalle Street; Chicago 3, Illinois) is Chairman of the Information Committee.

Special Events. Arrangements for nonsubstantive activities to be listed in the program issue (July *American Psychologist*) have already been made by the time this announcement appears. Those who wish to arrange for activities such as business meetings, reunions, luncheons, dinners, social hours, and headquarters space should address their requests to: Philip Ash, Associate Convention Manager; Inland Steel Company; 30 West Monroe; Chicago 3, Illinois. These activities will not be listed in the July *American Psychologist*, but may be listed in the *Convention Guide*.

Arrangements for all other special events in the two hotels must be made through the Chairman of the Special Events Committee, who will also handle the sale of tickets, when required, at Special Events Desks in each of the hotels. Individual organizations desiring special events will be responsible for guarantees to the hotels. Because of the high additional costs on

Sundays and holidays, participants are urged to avoid planning meal functions on either Sunday, September 4, or Labor Day, September 5.

Participants are urged to check with the Special Events Desk in order to take advantage of developments which may occur between the time of this announcement and the dates of the convention. The Chairman of this Committee is Lee B. Sechrest (Department of Psychology, Northwestern University; Evanston, Illinois).

APA Day Functions. Sunday, September 4, will be APA Day this year. Program sessions of interest to the entire APA membership have been planned. The general arrangement of the sessions will be the same as in past years, with some modifications.

All sessions will be held in the Medinah Temple, just a few blocks north of the hotels. A delicious buffet luncheon will be served in the dining room of the Medinah Temple. Participants are urged to purchase their tickets for this luncheon early. A reservation blank is included on the Advanced Registration Form. Those who attended four years ago remember that there was plenty of food and that it was all good!

Following the program sessions at the Medinah Temple there will be a reception for the officers of the APA at the Sherman. An all-APA dance in the Grand Ballroom of the Sherman will follow the reception.

Exhibits. A number of commercial and educational exhibits will be on display in the Exhibit Hall and on the mezzanine adjacent to the registration and meeting room areas in the Sherman. A wide variety of interesting and attractive exhibits has already been arranged, including some unique features which will be introduced at this meeting. There is still space for many others, however, and members are encouraged to suggest the names of potential exhibitors to the Exhibits Committee Chairman. Members who wish to exhibit scientific and educational materials are reminded that their application must be received prior to **May 15, 1960**. *No exhibits will be permitted anywhere in either of the two hotels except in the specified and approved exhibit areas.*

For information concerning facilities, cost, and so on, those who wish to exhibit should write to the Chairman of the Committee on Exhibits: Maurice O. Burke; Institute for Psychological Services; 3329 South Federal Street; Chicago 16, Illinois.

Public Relations. A Public Relations Office will be maintained in the Sherman. Public relations will be coordinated by Charles A. Boswell (Rohrer Hibler & Replogle; 30 West Monroe Street; Chicago 3, Illinois) and by Michael Amrine (American Psychological Association; 1333 Sixteenth Street, N.W.; Washington 6, D. C.).

Placement. A Placement Office will be operated on the third floor of the Morrison. Placement will be coordinated by Sheldon H. White (Department of Psychology, University of Chicago; Chicago 37, Illinois) and by Janice P. Fish (American Psychological Association; 1333 Sixteenth Street, N.W.; Washington 6, D. C.). The Placement Office will be open every day except Sunday, September 4, from 9:00 A.M. to 5:00 P.M.

Employers and applicants who plan to use this service are urged to send in their forms in advance. As in past years, booklets of position descriptions will be prepared prior to the convention and will be available to applicants at the beginning of the convention. This year, similar booklets of applicants' qualifications will be available to employers at the beginning of the convention. A Position Description Form and an Applicant Form appear at the end of this announcement. Completed forms should be returned to: Janice P. Fish; APA Central Office; 1333 Sixteenth Street, N.W.; Washington 6, D. C.

Note: Applicants and employers who wish to preregister must send their forms before August 10, 1960. After that date, they may register only at the Placement Office during the convention.

Projection Equipment. Authors of papers are urged to use mimeograph tables and charts, or other means of presenting their data, in the interest of clarity and effective presentation. Those who plan to use slides or other projection equipment, however, are advised to read carefully the specific instructions included in the call in the January *American Psychologist*. In making requests for projection equipment, be sure to specify exactly the type of equipment desired. William Kulick (Institute for Psychological Services, Illinois Institute of Technology; 3329 South Federal Street; Chicago, Illinois) is Chairman of the Audio-Visual Aids Committee.

Arrangements for the Care of Children. Facilities for the day-time care of children will be made available to participants. The extent of these facilities will be based in part upon replies to the relevant questions on the Advanced Registration Form.

In addition, however, participants interested in child care during the convention should register their specific requests and make inquiries as early as possible to the Chairman of the Child Care Committee: Charlotte Altman; Institute for Juvenile Research; 907 South Wolcott Avenue; Chicago 12, Illinois.

Parking and Transportation. There are a number of private and municipally operated garages located near the hotels. Parking in the private garages is about \$4.00 for 24 hours. In the self-parking, municipally operated garages the cost is approximately \$2.00 for 24 hours. Taxi service is plentiful. Both hotels are

on main bus lines; and both are close to railroads, buses, and airline terminals.

Preconvention Sessions. Participants are advised that both hotels are holding other conventions prior to ours and that preconvention sessions may be difficult to arrange, particularly if arrangements are made at the last moment. The Convention Manager will make every effort to assist in the scheduling of preconvention sessions, if participants will address their requests early and indicate their needs.

Convention Guide. As in the past, each registrant will receive a copy of the *Convention Guide* at the convention. This convenient pocket sized pamphlet includes a complete chronological listing of all programs and other convention activities; last minute information about the convention; and information about hotels, places of interest, and other facilities in the city. William Canning (Bureau of Child Study; 228 North LaSalle Street; Chicago 1, Illinois) is Chairman of the Convention Guide Committee.

Convention Lounge. The Ridibunda Lounge, which has served as the Convention Lounge in the past, has been revived and will be open every day in the Bal Tabarin, sixth floor, Sherman, from 4:00 P.M. Participants are urged to make this their headquarters for informal get-togethers. The divisions are urged to plan their social hours in the Ridibunda Lounge, thus avoiding the necessity for depositing individual minimum guarantees.

Women's Events. A number of events have been planned for wives. All women who are interested are invited to register at the Wives' Desk, near the registration area in the Sherman, and to receive information about the various events which have been planned for them. For several of the events the number who can be accommodated is limited, and wives are urged to register for these events early. Dorothea Ewers (745 Aberdeen Drive; Lincolnshire Estates; Crete, Illinois) is in charge of scheduling these events.

Volunteer Workers. At each convention, there is need for volunteer workers to supplement the various committees and to assist in staffing desks, offices, etc. Most of the work during the convention proper (as opposed to the long hours of detailed committee planning) is done by members and students who have volunteered their services. This year's Volunteer Workers Committee would appreciate offers to work or to recruit students who will work. If you will have some free time during the convention and would like to help, please fill out the Call for Volunteers Form at the end of this announcement and return it to the Chairman of the committee: Benjamin Burack; Roosevelt University; Chicago 5, Illinois.

ADVANCED REGISTRATION FORM

SIXTY-EIGHTH ANNUAL CONVENTION OF THE AMERICAN PSYCHOLOGICAL ASSOCIATION

Chicago, Illinois, September 1-7, 1960

Please type or print:

Name: Dr. Mr. Miss Mrs. Last First Middle Initial

Professional Affiliation: (to appear on badge, maximum of 20 letters per line) (Street Address) (City) (State)

The following information is requested for the Convention Directory:

1. Expected date of arrival: Departure:
2. APA membership status: Fellow Member Associate Member, Student Journal Group Foreign Affiliate Member, Psi Chi
3. Indicate Division memberships by number(s) There is no registration fee for APA Fellows, Members, Associates, Affiliates, and Members of the Student Journal Group or Psi Chi.
4. Nonmember

REGISTRATION FROM NONMEMBERS MUST BE ACCOMPANIED BY A REGISTRATION FEE OF \$3.00. MAKE CHECK PAYABLE TO: APA CONVENTION AFFAIRS BOARD.

The following information is requested to help plan special events and related facilities:

1. Is your spouse coming to the convention with you? Yes No
2. Are you bringing any children with you? Yes No If yes, check below:
 - a. Number in age group: Under 3 years 3-6 years 6-12 years Over 12 years
 - b. Do you want day nursery child care? Yes No

APA DAY, SUNDAY, SEPTEMBER 4

- I plan to attend the APA Day Buffet Lunch.
- Please reserve lunch ticket(s) for me at \$3.00 each, including tax and tip.
- Check for \$ enclosed for lunches.
- I do not wish a reservation for lunch.

You may register either at the Sherman or Morrison. Duplicate registration facilities will be set up and maintained throughout the convention.

HOTEL INFORMATION

..... I do not want a hotel reservation

Headquarters will be the Sherman and Morrison Hotels. The following rates will apply in both hotels. Please indicate the hotel and type of accommodations desired:

..... Single bedrooms @	\$ 8.00 \$10.00 \$12.00
..... Double bedrooms @	11.00 13.00 15.00
..... Twin bedrooms @	14.00 15.00 16.00
..... Dormitory rooms @	3.50 per person (This rate applies only for at least four or more in a room. Please list names below.)		

Hotel desired: Sherman Morrison

NOTE: THESE RATES ARE GUARANTEED AT THE RATE REQUESTED IF THE REGISTRATION BLANK IS RETURNED PRIOR TO AUGUST 1, 1960. AFTER AUGUST 1 EVERY EFFORT WILL BE MADE TO ASSIGN ROOMS AT THE RATE REQUESTED, BUT SUCH ASSIGNMENT IS QUITE UNLIKELY, AND CANNOT BE GUARANTEED. IT IS MOST LIKELY THAT RESERVATIONS RECEIVED AFTER AUGUST 1 WILL BE ASSIGNED AT THE MAXIMUM RATE SHOWN HERE.

MEMBERS ARE URGED TO RETURN THIS FORM PROMPTLY, AND IN ANY EVENT PRIOR TO AUGUST 1, IN ORDER TO BE SURE OF RECEIVING THE ACCOMMODATIONS DESIRED.

Note: Reservations will not be held beyond 6:00 P.M. except by request. Your reservation will be confirmed.

Mail Confirmation to: City State

Room occupants: (Be sure to give the names of all occupants.)

Name (Please print) Sex Address City State

Please send this form as early as possible to:

APA Housing Bureau, Room 900, 134 North La Salle Street, Chicago 2, Illinois

(Copies of this form may be obtained from the APA Housing Bureau or from the APA Central Office.)
Advanced Registration Forms received after August 1 may not be processed for preregistration.

GRADUATE EDUCATION IN PSYCHOLOGY

Report of the Conference on Graduate Education in Psychology, sponsored by the Education and Training Board of the American Psychological Association and supported by a grant from the National Institute of Mental Health, U. S. Public Health Service; held at Miami Beach, Florida, November 29 to December 7, 1958

Prepared by the Editorial Committee:

Anne Roe, *Chairman*,
and

John W. Gustad, Bruce V. Moore,
Sherman Ross, and Marie Skodak

Price \$1.50

THE AMERICAN PSYCHOLOGICAL ASSOCIATION

Dept. Grad

1333 Sixteenth Street, N.W.

Washington 6, D. C.

POSITION DESCRIPTION FORM

(Typewrite or print in pencil) APA CONVENTION PLACEMENT OFFICE Position Number.....

I. Name and Address of Employing Organization:

II. Position Title (include location if different from I.):

III. How many openings does this form cover:

IV. Applicant Requirements:

A. Degree: 1. PhD (EdD) 2. PhD preferred, will consider Master's
3. Master's 4. Other

B. Experience:

C. Other:

Sex: Male Female Either Age Range:

V. Position requirements:

A. Duties:

B. Starting Salary (depending on qualifications): Minimum Maximum

C. Position Begins: Immediately or, give date

VI. A. If you wish space to interview applicants, fill in the name of the interviewer and check your tentative interviewing schedule:

Sept. 1		Sept. 2		Sept. 3		Sept. 5		Sept. 6		Sept. 7	
A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.

B. If you have no plans for interviewing, please indicate the person to whom inquiries are to be sent:

VII. Check one category for listing your position:

Academic Clinical and Counseling Industrial and Research

(Return completed form to: Convention Placement; 1333 Sixteenth Street, N.W.; Washington 6, D. C. Copies of this form are available from this address.)

BOOKS, "SEPARATES," PAMPHLETS

Available at

THE AMERICAN PSYCHOLOGICAL ASSOCIATION, INC.

Books

- School Psychologists at Mid-Century.* 1955 (reprinted 1958). Pp. 230. \$2.75
Psychology and Mental Health. 1956. Pp. 154. \$1.75
America's Psychologists. 1957. Pp. 247. \$1.00
Research in Psychotherapy. 1959. Pp. 293. \$3.00
Graduate Education in Psychology. 1959. Pp. 97. \$1.50
Psychology and Rehabilitation. 1959. Pp. 146. \$1.50

"Separates"

- Ethical Standards of Psychologists.* \$1.00
Publication Manual. \$1.00
A Glossary of Some Terms Used in the Objective Science of Behavior. \$1.00
Technical Recommendations for Psychological Tests and Diagnostic Techniques. \$1.00

Pamphlets (single copy free; bulk orders 10¢ each)

- Educational Facilities and Financial Assistance for Graduate Students in Psychology*
Psychologists in Action
The Psychologist in Industry

ORDERS FOR \$2.00 OR LESS MUST BE PREPAID.

Order from:

AMERICAN PSYCHOLOGICAL ASSOCIATION

Dept. 1959

1333 Sixteenth Street, N.W.

Washington 6, D. C.

APPLICANT FORM

(Typewrite or print in pencil) APA CONVENTION PLACEMENT OFFICE **Applicant Number**.....

Name: Sex: Age:

Convention address: Phone:

Permanent address:

APA membership: Yes No

Academic Training: Degree	University	Year
Describe pertinent work history:		
Number of papers presented or published:		

Type of position desired:

Expected salary (optional): Preferred location:

Give a tentative schedule of the time you plan to be available in the Convention Placement Office for interviews:

Sept. 1		Sept. 2		Sept. 3		Sept. 5		Sept. 6		Sept. 7	
A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.

Under which field of specialization do you wish your application to be filed? Check no more than two boxes:

	Clinical
	Counseling
	Educational
	School

	Developmental
	Experimental
	General
	Physiological

	Human Engineering
	Industrial
	Personality
	Social

(Return completed form to: Convention Placement; 1333 Sixteenth Street, N.W.; Washington 6, D. C.
Copies of this form are available from this address.)

RESEARCH IN PSYCHOTHERAPY

Proceedings of an interdisciplinary conference, Washington, D. C., April 9-12, 1958

ELI A. RUBINSTEIN and MORRIS B. PARLOFF, *Editors*

Presentations and discussions by leading investigators in psychotherapy research, both psychologists and psychiatrists, combine to produce a critical evaluation of research objectives and methodologies

Prepared papers by J. C. Whitehorn, J. D. Frank, Lewis Robbins and R. S. Wallerstein, Timothy Leary and Merton Gill, C. R. Rogers, George Saslow and J. D. Matarazzo, J. I. Lacey, E. S. Bordin, and W. U. Snyder present comprehensive descriptions of large-scale research programs and extensive analyses of crucial research problems

Formal discussion papers by J. M. Butler, David Shakow, Milton Greenblatt, and Maurice Lorr, and informal discussion by all 29 participants, provide expert commentary on present status of research. The summary chapter by the editors is an orderly presentation of the major issues covered by the conference

Price: \$3.00

Order from:

AMERICAN PSYCHOLOGICAL ASSOCIATION

Dept. RP

**1333 Sixteenth Street, N.W.
Washington 6, D. C.**

CALL FOR VOLUNTEERS

ANNUAL CONVENTION: AMERICAN PSYCHOLOGICAL ASSOCIATION

Chicago, Illinois, September 1-7, 1960

It takes people—preferably people with psychological background—to run a convention. Would you be willing to help? If you are planning to come to the convention and can devote at least two periods (mornings, afternoons, evenings) to one of the many jobs that must be filled to run a smooth convention, would you please indicate the periods you would be available. If you are not an APA member or in the Student Journal Group or Psi Chi, the \$3 Registration Fee for nonmembers will be waived, as a small token of our appreciation.

1. Place the number 1 in each of your two (or more) first-choice times, the number 2 in each of your second-choice times, and the number 3 in each third-choice time. If you are concerned about avoiding time conflicts with programs of interest, consult the tentative convention schedule in the January issue of the *American Psychologist*.

	Wed. Aug. 31	Thurs. Sept. 1	Fri. Sept. 2	Sat. Sept. 3	Sun. Sept. 4	Mon. Sept. 5	Tues. Sept. 6	Wed. Sept. 7
9:00-1:00								
1:00-5:00								
5:00-8:30								

Note: There *will* be mealtime breaks for those who serve successive periods on the same day.

2. Check the services you offer:

..... General (clerical, filing, information-desk, etc.)

..... Typing (Fair Good)

..... Copy writer (announcements, summaries, etc.)

Name: Phone No.: Date:

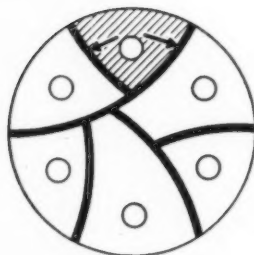
Mail Address: City: Zone: State:

School (if a student now): Grad. Student Undergrad.

Position (if *not* a student): Organization:

3. Please mail this form to: Benjamin Burack, Roosevelt University, Chicago 5, Illinois.

4. Unless you hear otherwise from us, please come to the Volunteer Workers Desk at your first-choice times (Sherman Hotel, Mezzanine Floor, Parlor M); if possible, come in earlier and get acquainted. *If a change occurs in your address or availability*, please write to Burack.



GROUP DYNAMICS: Research and Theory

**Dorwin Cartwright and Alvin Zander, Research Center
for Group Dynamics, University of Michigan, Editors**

A basic text for the course in group dynamics; a collateral text for courses in social psychology. Also a practical guide for people who work with groups—administrators, personnel officers, chairmen, social workers, individual psychologists.

There are forty-two chapters in the book, of which thirty-six comprise articles from learned journals or written especially for this volume. Six chapters written by the editors provide overviews of the topics into which the chapters are grouped: Introduction; Group Cohesiveness; Group Pressures and Group Standards; Individual Motives and Group Goals; Leadership and Group Performance; The Structural Properties of Groups.

The Second Edition will be published in May

The Second Edition is more than one hundred pages longer than the First Edition. Nineteen chapters in the First Edition are retained. Twenty-three chapters are new. Among the authors of chapters included in the new edition are: Robert F. Bales, Angus Campbell, Karl Deutsch, Leon Festinger, Fred E. Fiedler, John R. P. French, Jr., H. B. Gerard, Harold Guetzkow, Mason Haire, Theodore M. Newcomb, Albert Pepitone, Bertrand H. Raven, and Fred Strodbeck. 832 pp. \$7.25

Teachers of Group Dynamics: Write for your examination copy

ROW, PETERSON AND COMPANY

Publishers of Good Books in Evanston, Ill., and Elmsford, N. Y.

A research report that has been widely adopted as a text

PATTERNS OF CHILD REARING

**Robert R. Sears, Eleanor E. Maccoby, Stanford University;
and Harry Levin, Cornell University**

A report on actual child-rearing practices based on data obtained from comprehensive interviews with a diversified sample of American mothers. Examines alternative training methods and shows their effects on the child; contains verbatim accounts by mothers of their child-training experiences; makes use of refined scientific techniques in obtaining information and evaluating data. The book contributes significantly to the theory of personality development and suggests promising avenues for further research in parent-child relationships.

For text use in courses in child development, personality, parent-child relationships, child psychology, and the preschool child. Collaborating authors include Edgar L. Lowell, Pauline S. Sears, and John W. M. Whiting.

"...the kind of seasoned research report that every teacher in the family field hungers for. It covers the entire range of the most vital questions in the area of parent-child relationships, bringing together judiciously the major theoretical problems, the practical concerns, and a highly useful body of data...a rich source of information and ideas for teachers and researchers."—Robert O. Blood, Jr., University of Michigan. 549 pp. \$5.25

Other works of interest to psychologists

A THEORY OF COGNITIVE DISSONANCE

Leon Festinger, Professor of Psychology, Stanford

A new and original theory on human behavior in situations where the individual's actions in a given situation are inconsistent with what he knows about that situation. Explores how people behave when holding inconsistent opinions. 291 pp. \$5.25

PROPAGANDA ANALYSIS: A Study of Inferences Made from Nazi Propaganda in World War II

Alexander L. George, The RAND Corporation

This book reports on the use of propaganda analysis by the U.S. government during World War II for the purpose of inferring Nazi military intentions and political calculations from Nazi propaganda. The author addresses himself to the twin tasks of evaluating the performance of the F.C.C. analysts and of refining the methodology of propaganda analysis. This book will be of interest in a wide variety of specialized areas: international relations, history, political and strategic analysis, clinical psychology, journalism, and public opinion research. 287 pp. \$6.00

ROW, PETERSON AND COMPANY

Publishers of Good Books in Evanston, Ill., and Elmsford, N. Y.

FOR THE LAST WORD IN PSYCHOLOGY

✓ CHECK THE THOMAS CATALOG

PSYCHOLOGICAL AND PSYCHIATRIC ASPECTS OF SPEECH AND HEARING DISORDERS edited by **Dominick A. Barbara**, *Karen Horney Clinic, N. Y. C.* Twenty-five well-known authorities from various disciplines present a broad view of the psychological processes involved in the origin, comprehension, and treatment of speech, hearing, and communication disorders. *Publication date June 1960*

INTERPERSONAL RELATIONSHIPS IN THE HOSPITAL by **Warner F. Bowers**, *Tripler U. S. Army Hospital, Honolulu, Hawaii*. For the first time a physician writes on the ART OF MEDICINE—what to say to a patient and how to say it. *Pub. Jan. '60, 136 pp., \$5.00*

THE TUTORING OF BRAIN-INJURED MENTALLY RETARDED CHILDREN: An Experimental Study by **James J. Gallagher**, *Univ. of Illinois, Urbana*. A fascinating report on a three-year experimental tutoring program. Includes methods, results, case studies, and educational implications. *Publication date August 1960*

CREATIVE VARIATIONS IN THE PROJECTIVE TECHNIQUES by **Molly Harrower**, *Temple Univ. Med. Center*; **Pauline Vorhaus**, *Veterans Administration, N. Y. C.*; and **Melvin Roman** and **Gerald Bauman**, both of *Albert Einstein Med. College*. Clinical psychologists with analytic experience will welcome these new and practical techniques—projective counseling, interaction testing, and the structured interview. *Pub. April '60, 160 pp., 32 il. (Am. Lec. Psychology), \$8.50*

BABY TALK by **Morris Val Jones**, *School for Cerebral Palsied Children, San Francisco*. When is baby talk serious? What are the causes? What can be done about it? An expert answers these basic questions. *Pub. Feb. '60, 104 pp., 9 il., \$4.50*

AN APPLICATION OF PSYCHOANALYSIS TO EDUCATION by **Richard M. Jones**, *Brandeis Univ., Waltham, Mass.* Includes a detailed narrative of an experimental group of high school seniors in the form of tape-recorded verbatim records of classroom exchanges over a school year. *Publication date May 1960*

PSYCHOANALYTIC CONCEPTS OF DEPRESSION by **Myer Mendelson**, *Univ. of Pa., Philadelphia*. A thorough going and critical examination of the pattern of historical development that has led to the present understanding of depression. *Publication date May 1960*

THE CLOWN FAMILY SPEECH BOOK (We Want Toto) by **Morris P. Pollock** and **Miriam Pollock**, *Pollock School Inc., Brookline, Mass.* Written to meet the exigency of young children (ages 4 to 9) with speech problems. Fun and humor pervade the book and exercises—the child relaxes as he enjoys pleasurable experiences. Workbook available separately. *Publication date April 1960*

LIBIDO by **J. E. Schmidt**, *Charlestown, Indiana*. Brings together for the first time the scientific or learned terminology and bulk of esoteric slang which constitute the vocabulary of sex and libido. A practical guide to the psychologist and sociologist concerned with morals. Available direct from the publisher only. When ordering please indicate professional status to aid the publisher in screening orders. *Pub. Jan. '60, 288 pp., \$8.00*

A DICTIONARY FOR MEDICAL SECRETARIES by **Isabel Alice Stanton**, *Baylor Univ. College of Dentistry*. With an eye to the modern trend toward speed and simplicity, Miss Stanton has at last presented the busy medical secretary with a "book of her own. Over 3500 entries in alphabetical order. *Pub. March '60, 184 pp., \$6.50*

OUTLINE OF GENERAL PSYCHOTHERAPY by **John G. Watkins**, *Veterans Administration Hospital, Portland, Oregon*. With consummate skill Dr. Watkins has achieved an almost impossible task, the gathering, classification and analysis of the most important writings of our time that relate in any way to psychotherapy. *Pub. Jan. '60, 286 pp., \$9.25*

CHARLES C THOMAS • PUBLISHER

**301-327 East Lawrence Avenue
SPRINGFIELD • ILLINOIS**

NEW PSYCHOLOGY

CHILD PSYCHOLOGY, 5th Edition

by Arthur T. Jersild, Co-
lumbia Teachers College

This new edition is a comprehensive treatment of child psychology from the prenatal stage into early adolescence, integrating developmental literature with material from clinical and psychoanalytical sources. It emphasizes both the objective and subjective dimensions of the child's life and, to a greater degree than in the 4th Edition, emphasizes the concept of the self as an essential consideration in understanding all phases of developmental psychology. New sections offered are those on heredity and environment, parent-child relationships, the critical phase, genetic aspects of the development of the self, expanded discussion of the gifted child, and a revision of the chapter on children's thinking.

Pub. March App. 592 pp.
Price \$7.25

TEXTS

PROCEDURES AND PREPARATION FOR COUNSELING

by William C. Cottle, and
Norville M. Downie, both of
University of Kansas

The chief objective of this new book is to aid the counselor in obtaining as much information as possible about his client, in order that he may provide the most effective counseling. Using a practical approach, emphasizing reason, it presents the proper procedures for competent counseling, stressing the preparation before the counseling period more than the actual counseling process. The theme is: better guidance leads to identification of abilities, which in turn leads to better utilization of manpower. Graphs, charts and tables are employed for clarity.

Pub. June App. 384 pp.
Price: \$6.00

DISCIPLINE, ACHIEVEMENT AND MENTAL HEALTH

by E. Lakin Phillips, Na-
tional Orthopedic and Re-
habilitation Hospital,
Daniel N. Wiener, High-
land Park Psychological
Service, and Norris G. Har-
ing, University of Maryland

This new text takes the three major problems of education—discipline, achievement and long-range mental health—and welds them into a single set of actions and attitudes for school personnel. It puts discipline in proper perspective: it takes a modern, scientific viewpoint regarding child behavior and development, but keeps the educational and the social group perspectives clearly in mind. The book makes the classroom teacher aware of when her actions are effective and wholesome by and through systematic observation of the results of her actions toward the child.

Pub. May App. 233 pp.
Price: \$4.50



To receive approval copies promptly, write: Box 903

PRENTICE-HALL, Inc.

Englewood Cliffs, New Jersey

INDIVIDUAL BEHAVIOR AND GROUP ACHIEVEMENT

Ralph M. Stogdill

*This original work
accomplishes an important
break-through in
behavior science theory*

- Interaction theory
- expectation theory
- value theory
- role theory
- group theory
- achievement theory

are built into
one logically
coherent system

352 pp. \$5.00

OXFORD UNIVERSITY PRESS
417 Fifth Avenue, New York 16

PERSONALITY DYNAMICS AND EFFECTIVE BEHAVIOR

James Coleman
*University of California
at Los Angeles*

A BASIC TEXT for courses in
the Psychology of Adjustment
576 pages . . . List Price \$5.50
(available this Summer)

SCOTT, FORESMAN AND COMPANY
Chicago Atlanta Dallas Palo Alto Fair Lawn, N.J.



Presenting . . .

THE CENTURY PSYCHOLOGY SERIES

- Social Psychology**, by Charles Bird. \$4.50
- Learning More by Effective Study**, by Charles and Dorothy Bird. \$2.25
- Psychological Counseling**, by Edward S. Bordin. \$5.50
- A History of Experimental Psychology**, 2nd ed., by Edwin G. Boring. \$6.00
- Sensation and Perception in the History of Experimental Psychology**, by Edwin G. Boring. \$6.00
- Readings in Modern Methods of Counseling**, edited by Arthur H. Brayfield. \$5.50
- A Casebook of Counseling**, by Robert Callis, Paul C. Polmantier, and Edward C. Roeber. \$5.00
- Readings in the History of Psychology**, edited by Wayne Dennis. \$5.50
- Techniques of Attitude Scale Construction**, by Allen L. Edwards. \$4.00
- Modern Learning Theory**, by William K. Estes, Sig-mund Koch, Kenneth MacCorquodale, Paul E. Meehl, Conrad G. Mueller, Jr., William N. Schoenfeld, and William S. Verplanck. \$5.50
- Schedules of Reinforcement**, by C. B. Ferster and B. F. Skinner. \$9.50
- Social Relations and Morale in Small Groups**, by Eric F. Gardner and George G. Thompson. \$6.00
- Great Experiments in Psychology**, 3rd ed., by Henry E. Garrett. \$3.75
- Exceptional Children**, by Florence L. Goodenough. \$4.50
- Developmental Psychology**, 3rd ed., by Florence L. Goodenough and Leona E. Tyler. \$6.00
- Physiological Psychology**, by Starke R. Hathaway. \$4.00
- Seven Psychologies**, by Edna Heidbreder. \$4.75
- Theories of Learning**, 2nd ed., by Ernest R. Hilgard. \$6.00
- Conditioning and Learning**, by Ernest R. Hilgard and Donald G. Marquis. \$4.00
- Hypnosis and Suggestibility**, by Clark L. Hull. \$6.00
- Principles of Behavior**, by Clark L. Hull. \$5.50
- Development in Adolescence**, by Harold E. Jones. \$2.75
- The Definition of Psychology**, by Fred S. Keller. \$1.50
- Principles of Psychology**, by Fred S. Keller and William N. Schoenfeld. \$4.75
- Psychological Studies of Human Development**, by Raymond G. Kuhlen and George G. Thompson. \$3.75
- The Cultural Background of Personality**, by Ralph Linton. \$2.00
- Vocational Counseling with the Physically Handi-capped**, by Lloyd H. Lofquist. \$5.00
- Studies in Motivation**, edited by David C. McClelland. \$6.00
- Current Studies in Psychology**, by Joseph F. McGuigan and Allen D. Calvin. \$2.65
- The Achievement Motive**, by David C. McClelland, John W. Atkinson, Russell A. Clark, and Edgar L. Lowell. \$6.00
- Principles of Applied Psychology**, by A. T. Poffen-berger. \$5.00
- The Behavior of Organisms: An Experimental Analysis**, by B. F. Skinner. \$5.50
- Cumulative Record**, by B. F. Skinner. \$6.50
- Verbal Behavior**, by B. F. Skinner. \$5.50
- Diagnosing Personality and Conduct**, by Percival M. Symonds. \$4.50
- Dynamic Psychology**, by Percival M. Symonds. \$5.25
- The Dynamics of Human Adjustment**, by Percival M. Symonds. \$6.00
- The Ego and the Self**, by Percival M. Symonds. \$2.50
- Educational Psychology**, by George G. Thompson, Eric F. Gardner, and Francis J. Di Vesta. \$6.00
- Student Workbook for Educational Psychology**, by George G. Thompson, Eric F. Gardner, and Francis J. Di Vesta. \$1.90
- Selected Writings from a Connectionist's Psychol-ogy**, by Edward L. Thorndike. \$3.50
- Introduction to Methods in Experimental Psychol-ogy**, 3rd ed., by Miles A. Tinker and Wallace A. Russell. \$4.50
- The Psychology of Human Differences**, 2nd ed., by Leona E. Tyler. \$6.00
- The Work of the Counselor**, by Leona E. Tyler. \$3.75
- Experimental Psychology: An Introduction**, by Benton J. Underwood. \$5.50
- Psychological Research**, by Benton J. Underwood. \$4.50
- Elementary Statistics**, by Benton J. Underwood, Carl P. Duncan, Janet A. Taylor, and John W. Cotton. \$3.75
- Persons and Personality**, by Sister Annette Walters and Sister Kevin O'Hara. \$5.25

APPLETON-CENTURY-CROFTS, INC.

35 West 32nd Street

New York 1, New York



clinical psychologists

Participate in one of the most progressive treatment and research programs in the nation—with promotional opportunities and liberal employee benefits.

Interviews for California state positions will be conducted at the following conventions: *

Eastern Psychological Association Conference
New York City
April 14 - 16

Southeastern Psychological Association Conference
Atlanta, Georgia
March 30 - April 4

Midwestern Psychological Association Conference
St. Louis, Missouri
April 28 - 30

Western Psychological Association Conference
San Jose, California
April 21 - 23

The California State Representatives will have authority to make definite employment offers.

* Or write: Medical Personnel Services
State Personnel Board
801 Capitol Avenue, Sacramento 14, California

A GLOSSARY OF SOME TERMS USED IN THE OBJECTIVE SCIENCE OF BEHAVIOR

By
WILLIAM S. VERPLANCK

Provides an empirical vocabulary in the science of human and animal behavior

Familiarizes readers with developments in the study of animal behavior

Clarifies concepts used by behaviorists and ethologists

Price \$1.00

Order from:
**AMERICAN
PSYCHOLOGICAL
ASSOCIATION**

**1333 Sixteenth Street, N.W.
Washington 6, D. C.**

NEW! The Second Edition of . . .

THE PSYCHOLOGY OF MENTAL HEALTH

LOUIS P. THORPE, *University of Southern California*

Widely used textbook presents a comprehensive treatment of the main issues and topics in the field of mental health. Concentrating on the normal, reasonably well-adjusted individual, it also analyzes the causes and patterns of deviate behavior and of psychoneuroses and psychoses. The book emphasizes the influence of home, school, and community

environment, plus the importance of prevention in maintaining mental health. Includes new materials on the organization of the normal personality, the relation between religion and mental health, mental health in business and industry, etc. *2nd Ed., 1960. 145 ill., tables; 614 pp. \$6.50*

THE PSYCHOLOGY OF EXCEPTIONAL CHILDREN

**KARL C. GARRISON, *University of Georgia, and*
DEWEY G. FORCE, Jr., *University of Minnesota***

This well-known introductory textbook discusses the nature and identification of exceptional children and the ways in which exceptionality affects emotional, social, and educational adjustment. Using a realistic developmental approach, it stresses the contribution which the regular classroom teacher

can make to the child's education and welfare. The book summarizes current developments, concepts, and research; includes material on such areas of exceptionality as epilepsy, cardiac conditions, and cerebral palsy. *3rd Ed., 1959. 103 ill., tables; 586 pp. \$6*

PRINCIPLES OF GENERAL PSYCHOLOGY

GREGORY A. KIMBLE, *Duke University*

Contemporary psychology is presented as an objective, observational science in this outstanding textbook. It introduces the student to the broad field of study and basic methodology, including the testing of intelligence; covers sensation and perception; deals with the rudiments of developmental psychology and learning theory; and treats behavior dynamics, including psychopathology. The most important areas of psychology are treated in terms

of key experiments. "One of the most readable elementary textbooks. The author's style is clear and his treatment . . . well organized."—**Clarence W. Brown**, *University of California, Berkeley*. "Factual and vigorous."—**William J. McGill**, *Massachusetts Institute of Technology*. Instructor's Manual and Student Workbook available. *1956. 228 ill., tables; 400 pp. \$6*

ADOLESCENT AGGRESSION

A Study of the Influence of Child-Training Practices and Family Interrelationships

**ALBERT BANDURA, *Stanford University, and*
RICHARD H. WALTERS, *University of Toronto***

This revealing new study examines the development of antisocial, aggressive behavior in adolescent boys. Based on interviews and projective tests of boys and their parents, the study employs a carefully matched control group, and minimizes the influence of constitutional and sociological factors.

Extensive quotations from the interviews are included. The interview schedules, rating scales, and thematic deviation tests used in the study are given in the appendices. A volume in *A Psychology Series* edited by J. McV. Hunt. *1959. 72 ill., tables; 476 pp. \$7.50*

THE RONALD PRESS COMPANY

15 East 26th Street, New York 10, New York

*New Professional & Pedagogical Books
for Psychologists—Recent Publications
of The Free Press of Glencoe, Illinois*

**CREATIVITY AND THE INDIVIDUAL:
Summaries of Selected Literature**

By Morris I. Stein and Shirley J. Heinze, Center for the Study of Creativity and Mental Health, University of Chicago. In an effort to identify and stimulate the characteristics of the creative process, the authors, on the basis of their own research, have selected and summarized more than 300 articles and books which they feel are fundamental and will be helpful to anyone seeking a better understanding of the creative process. A publication of the Graduate School of Business, University of Chicago.

\$10.00

THE SOCIOMETRY READER

Edited by J. L. Moreno and Others. As the most systematic and developed crystallization of the trends toward group measurement, sociometry has influenced all branches of the social sciences and its techniques of measurement are the most widely accepted of the methods available to study small groups.

This new Free Press reader is a collection of the most important articles in the field of sociometry. The selections range from the foundations of the discipline, through methodology and the major areas of exploration, to history. They testify to the scope of sociometry's theoretical system by including such topics as the evaluation of combat unit morale, personnel administration, and social rejection in college.

\$9.50

**AN INTRODUCTION TO
LONGITUDINAL STATISTICAL ANALYSIS**

By Nathan Goldfarb, Hofstra College. Longitudinal analysis, while often preferred as a survey design due to its single-sampling technique, is usually believed to involve too many insurmountable difficulties for practical research. This book is designed to show what these problems are and how they may be solved. It is also the first comprehensive review of the longitudinal design.

Clearly and simply, the author gives the peculiarities, advantages, and disadvantages of the various kinds of longitudinal studies, including panel studies, cohort studies, long-term public health studies, and industrial and geographic mobility studies. He describes coding and tabulating methods for organizing large masses of data and practical methods for describing the results.

\$5.00



*Orders should be sent
to The Free Press
119 West Lake Street
Chicago 1, Illinois*

Engineering Psychologist

**Ph. D. in Experimental or
Physiological Psychology**

Additional academic training in physical sciences, mathematics, or engineering preferred, but industrial experience will be considered.

Challenging position in expanding Biochemical Research Section. Position involves interaction with other psychologists, physiologists, mathematicians, and engineers currently working in such problem areas as

Weapon system design

Perception

Mathematical learning theory

Motor response dynamics

**Computer applications for human
dynamics assessment**

Psychophysiology

Flight trainer design

A position like this is open only occasionally, and is an exceptional opportunity for the right man with drive, imagination, and ability.

Please submit résumé to

Mr. CHARLES JONES

*Director of Technical and Scientific
Personnel*

GOODYEAR AIRCRAFT

AKRON 15, OHIO

THREE

FINE

TEXTS

**PSYCHOLOGY IN
THEORY AND
PRACTICE**

Thomas A. Ringness
Herbert J. Klausmeier
Arthur J. Singer, Jr.

"PSYCHOLOGY IN THEORY AND PRACTICE is one of the best-organized texts I have yet seen. Its format and style make for good readability. Chapter 15 entitled *Science and Other Means Toward Truth* is a valuable addition to an introductory text in Psychology."

Thor Quanbeck
Augustana College
South Dakota

480 pages

1959

\$6.00

*Student's and Instructor's Manuals
are available.*

**COUNSELING FOR
PERSONAL ADJUSTMENT
IN SCHOOLS AND COLLEGES**

Fred McKinney

"... Because he shows how 'there are some common processes underlying all effective counseling,' his book has a scope which will make it valuable not only to counselors in an educational setting but also to teachers, ministers, social workers, and psychotherapists of varying persuasions—all, in brief, who seek to assist others with personal problems."

George F. J. Lehner
from *Contemporary Psychology*
March, 1959

584 pages

1958

\$6.50

IN

PSYCHOLOGY

FROM

**HOUGHTON
MIFFLIN CO.**

Boston

New York

Atlanta

Geneva

Dallas

Palo Alto

**THE PSYCHOLOGY
OF ADJUSTMENT,
2nd edition**

Laurance Frederic Shaffer
Edward Joseph Shoben, Jr.

"This book is comprehensive and rests on a firm scientific foundation. It is readable and excellent for use either with students taking only one course in personality and adjustment or for those taking an undergraduate major in psychology."

Robert S. Nichols
North Carolina State College
Division of College Extension

672 pages

1956

\$6.25

*Instructor's Handbook of Objective
Test Items is available.*

ABC TEXTS IN PSYCHOLOGY . . .

Psychology of Personal and Social Adjustment • Second Edition

Henry Clay Lindgren, San Francisco State College

A practical, readable text that helps the normal individual

- develop a more penetrating understanding of the behavior of himself and others
- work out problems involved in attaining success in college, in choosing and adjusting to an occupation, and in courtship and marriage

A Workbook in Psychology of Personal and Social Adjustment

Jules Grossman and Henry Clay Lindgren, San Francisco State College

Instructor's Manual *Lindgren and Grossman*

General Psychology *Henry E. Garrett, University of Virginia*

An introductory text that combines the biological and social approaches to present

- a functional treatment of the structure of the nervous system
- a discussion of those applications of psychology of greatest interest and benefit to the undergraduate student

Projects in Psychology • A Student's Manual to Accompany Garrett's General Psychology

Robert J. Williams and August A. Fink, Jr., Columbia University

Test Questions for General Psychology *Henry E. Garrett*

**COLLEGE
DIVISION**

55 Fifth Avenue, New York 3, New York

American Book Company

INNER CONFLICT AND DEFENSE

DANIEL R. MILLER and GUY E. SWANSON, *The University of Michigan*

Here for the first time the psychoanalytic theory of conflict is rigorously tested in a sociological context. Written by a psychologist and a sociologist, this book describes an empirical study of the social factors and child-rearing practices that predispose individuals to favor particular methods of resolving conflict.

The subjects—pre-adolescent boys in Detroit public schools—were placed in situations which created conflict. Their reactions in terms of moral standards, defense mechanisms, and expressive styles were measured objectively. This data was correlated with social class and information obtained from the mothers on such child-rearing practices as methods of discipline, types and frequencies of reward, and timing of weaning and toilet training. 1960, 480 pp., \$6.95.

HENRY HOLT AND COMPANY, INC., NEW YORK

Contemporary Psychology

A JOURNAL OF REVIEWS

July 1959

VOLUME IV • NUMBER 7

- | | |
|----------|--|
| Page 193 | Words and Things , by Roger Brown
<i>Reviewed by J. J. JENKINS</i> |
| 196 | Existence: A New Dimension in Psychiatry and Psychology , by Rollo May, Ernest Angel, and H. F. Ellenberger (Eds.)
<i>Reviewed by C. R. ROGERS</i> |
| 198 | The Study of Leadership , by C. G. Browne and T. Cohn (Eds.)
<i>Reviewed by G. C. HOMANS</i> |
| 199 | Leader Attitudes and Group Effectiveness , Fiedler
<i>Reviewed by E. A. FLEISHMAN</i> |
| 200 | The Unsilent Generation , by Otto B.
<i>Reviewed by W. L. BARNETTE, JR.</i> |
| 201 | Young Man Luther: A Study in History , by E. H. Erikson
<i>Reviewed by H. G. McCURDY</i> |
| 202 | Aggression , by J. P. Scott
<i>Reviewed by LEONARD</i> |
| 204 | CP SPEAKS
By GARDNER M. |
| 206 | Common Sense
Abraham
Teach
Nichols |

AMERICAN PSYCHOLOGICAL ASSOCIATION, INC.
1333 Sixteenth Street, N. W., Washington 6, D. C.

Please send a sample copy of CONTEMPORARY PSYCHOLOGY to:

Name.....

Address.....

The Brown Schools for **MENTALLY-RETARDED** **and EMOTIONALLY-** **DISTURBED** **Children and Adults**

Seven resident centers make it possible for THE BROWN SCHOOLS to place the exceptional person in a climate of group living most congenial to his age and interests, to his personality organization, and his level of social, educational, emotional, and physical development.

To receive a detailed catalogue and other regular publications describing in text and photographs the services and facilities of THE BROWN SCHOOLS, use the coupon below.

THE BROWN SCHOOLS,

Dept. E-O
P. O. Box 4008

Austin 51, Texas

Name _____

Position _____

Street or Box No. _____

City _____ Zone _____ State _____

THE BROWN SCHOOLS

AUSTIN, TEXAS



Founded in 1940



Human Factors Research
Operations Research
Training Research

Unique opportunities
for outstanding men
in all fields of science.

Research-consulting organization
...with a seasoned professional
capability...

for effective team approaches...
to complex and diversified
problems...in the development
and analysis of industrial and
military equipments and systems.

Dunlap and Associates, Inc.

HOME OFFICE:

429 Atlantic Street, Stamford, Connecticut
Fireside 8-9271

BRANCH OFFICES:

1532 Third Street, Santa Monica, California
EXbrook 3-0166

425 Thirteenth Street, N.W., Washington 4, D.C.
MEtropolitan 8-1140

Clark, Channell, Inc., of Stamford, Connecticut,
an affiliate, provides services in management
analysis, appraisal, development and recruitment.

OXFORD

NEW AND RECENT TEXTS

General Experimental Psychology:

AN INTRODUCTION TO PRINCIPLES and TECHNIQUES

by LAWRENCE M. BAKER, Purdue University

Focusing on the experimental process and its results, this new work provides a sound basic text for the beginning course in experimental psychology. Emphasis throughout is on the prerequisites for successful experimentation—sound methods and techniques, careful evaluation of results. A special chapter is devoted to *Designing and Performing an Original Experiment*. Bibliography and index.

1960

434 pp.

illus., \$6.00

Laboratory Experiments in General Psychology

by LAWRENCE M. BAKER and CARROLL WEISIGER, JR., Purdue University; and WILLIAM M. TAYLOR, University of Akron

These experiments, illustrative of most of the major areas in experimental psychology, require only the use of standard apparatus rather than complex, expensive equipment. The manual is thus ideally suited for use in any college psychology laboratory. Work pages, tables, questions, and references included.

1960

128 pp.

illus. paperbound, \$2.25

Contributions to Modern Psychology:

SELECTED READINGS IN GENERAL PSYCHOLOGY

edited by DON E. DULANY, University of Illinois; RUSSELL L. DE VALOIS, Indiana University; DAVID C. BEARDSLEE, Wesleyan University; MARIAN R. WINTER-BOTTOM, Connecticut College

An exciting and challenging collection of original readings organized around eight key topics in general psychology. *A separate pamphlet of tests has just been published and is now available free to teachers using the book.*

1958

408 pp.

illus. paperbound, \$3.25

Measurement and Statistics:

A BASIC TEXT EMPHASIZING BEHAVIORAL SCIENCE APPLICATIONS

by VIRGINIA L. SENDERS, University of Minnesota

1958

549 pp.

\$6.00

Developing Efficient Reading

by LEONARD S. BRAAM and WILLIAM D. SHELDON, both of Syracuse University

1959

128 pp.

paperbound, \$2.25

OXFORD UNIVERSITY PRESS

417 Fifth Ave., N. Y. 16, N. Y.

More

PSYCHOLOGICAL MONOGRAPHS for 1959, Volume 73

THE EFFECTS OF EARLY EXPERIENCE ON SUBSEQUENT EMOTION-
ALITY AND RESISTANCE TO STRESS

by ROBERT ADER

\$1.00

QUASI-THERAPEUTIC RELATIONS IN SMALL COLLEGE AND
MILITARY GROUPS

by FRED E. FIEDLER, EDWIN B. HUTCHINS, and JOAN S. DODGE

\$1.00

THE INFLUENCE OF DIFFERENT ACTIVITIES ON THE APPARENT
LENGTH OF TIME

by JOHN C. LOEHLIN

\$1.00

THE ONTOGENY OF CERTAIN LOGICAL OPERATIONS:
PIAGET'S FORMULATION EXAMINED BY NONVERBAL METHODS

by MARTIN S. BRAINE

\$1.50

THE INFLUENCE OF CLASSIFICATION REQUIREMENTS ON
GRADIENTS OF RESPONSE

by MICHAEL A. WALLACH

\$1.00

A FACTOR-ANALYTIC STUDY ACROSS THE DOMAINS OF REASONING,
CREATIVITY, AND EVALUATION

by NORMAN W. KETTNER, J. P. GUILFORD and PAUL R. CHRISTENSEN

\$1.00

GROUP PSYCHOTHERAPY AND CONCOMITANT PSYCHOLOGICAL
CHANGE

by EARL J. ENDS and CURTIS W. PAGE

\$1.00

PHOTOSENSITIZATION IN RELATION TO MEAN AND STANDARD
DEVIATION VALUES

by RICHARD T. ZEGERS

\$1.00

CORRELATES OF LATER PERFORMANCE AND SPECIALIZATION IN
PSYCHOLOGY

by E. LOWELL KELLY and LEWIS R. GOLDBERG

\$1.00

Order from:

AMERICAN PSYCHOLOGICAL ASSOCIATION

1333 Sixteenth Street, N.W.

Washington 6, D. C.

Rand McNally Textbooks in Education

GUIDANCE: A DEVELOPMENTAL APPROACH

by HERMAN J. PETERS, *The Ohio State University*
and GAIL F. FARWELL, *University of Wisconsin*

Here is a basic text which relates guidance to instruction and administration as well as to the environment of the child, the school, and especially the classroom teacher. The principles and practices of guidance are illustrated by many examples of functions that classroom teachers can perform in relation to preparation and work situations and to the primary and secondary responsibilities of teachers, counselors, and administrators.

1959 507 pages 6 x 9 inches \$6.00 list

GUIDANCE READINGS FOR COUNSELORS

Edited by GAIL F. FARWELL, *University of Wisconsin*
and HERMAN J. PETERS, *The Ohio State University*

These 84 carefully selected readings in guidance should greatly broaden the professional outlook of those counselors and counselor educators who do not have easy access to a wide variety of periodicals. Each of the 10 chapters offers many views in and approaches to a different aspect of guidance. The historical perspective, the base for guidance and counseling, approaches for helping others, and the need for research and increased professionalization are among the topics covered.

Spring 1960 c. 700 pages 6 x 9 inches \$7.50 probable list

THE INFORMATION SERVICE IN GUIDANCE: OCCUPATIONAL, EDUCATIONAL, SOCIAL

by WILLA NORRIS, *Michigan State University*
FRANKLIN R. ZERAN, *Oregon State College*
and RAYMOND W. HATCH, *Michigan State University*

Both a text for courses in occupational and educational information and a resource book to aid school staffs in performing their guidance responsibilities, this volume emphasizes the information service as such, rather than the information alone. The majority of chapters are devoted to occupational and educational information, but those on social information are a unique contribution.

Spring 1960 650 Pages 6 x 9 inches \$6.75 probable list



College Department

RAND MCNALLY

P. O. Box 7600 Chicago 80, Illinois

New Basic Books for the Psychologist

THE ETIOLOGY OF SCHIZOPHRENIA

Edited by Don D. Jackson, M.D.

Seventeen specialists and practitioners, drawing upon their extensive research experiences, join in an up-to-date presentation of scientific knowledge about the origins and causes of schizophrenia. Representing all major points of view—genetic, biochemical, dynamic, physiological, psychoanalytic and socio-cultural—the contributors include such eminent authorities as Jan A. Böök, Murray Bowen, Robert G. Heath, Seymour S. Kety, L. W. Sontag, and the editor.

June; \$7.50

AMERICANS VIEW THEIR MENTAL HEALTH

By Gerald Gurin, Joseph Veroff and Sheila Feld

Here is an accurately documented presentation of the fears, tensions and anxieties that beset Americans today, incorporating the findings of intensive studies of thousands of "normal" men and women. Prepared by three social psychologists at the Survey Research Center of the University of Michigan, it is the fourth volume in the Joint Commission on Mental Illness and Health series.

May; \$7.50

RECENT PUBLICATIONS OF UNUSUAL INTEREST

HUMAN POTENTIALITIES

By Gardner Murphy

The distinguished psychologist's speculations on what man may yet become—depending on the choices he makes today. "Adds a new dimension in psychology." *Henry Margenau.*

\$6.00

THE PSYCHODYNAMICS OF FAMILY LIFE

By Nathan W. Ackerman, M.D.

The diagnosis and treatment of family relationships. "A mature, carefully thought-out work that stems from years of experience." *Don D. Jackson, M.D.* "Rich in clinical insights." *American Sociological Review.*

\$6.75

EXISTENCE

Edited by Rollo May, Ernest Angel, Henri F. Ellenberger

"A detailed description of the existentialist approach as applied in the practice of counseling and psychotherapy.... It is an approach which deserves the most careful study of all who are concerned with troubled people." *Marriage and Family Living.*

\$7.50

BASIC BOOKS, Publishers, 59 Fourth Avenue, New York 3, N.Y.

